

Superfund Program Implementation Manual FY 04/05

Appendix B: Response Actions

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Appendix B Response Action

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Appendix B
Response Action
Targets and Measures

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APPENDIX B RESPONSE ACTIONS

B.A CURRENT PROGRAM PRIORITIES

B.A.1 Protect Human Health and the Environment

Protection of human health and the environment remains the highest priority for the Superfund Program. EPA will continue to address the worst sites first while balancing the need to complete response actions at sites. The Agency will ensure that available resources are disbursed in a fiscally sound manner. Maximizing Potentially Responsible Party (PRP) involvement remains a high priority.

a. Removal Actions

The goal of EPA's emergency response and removal program is to provide quick response to immediate threats to public health and the environment from releases of hazardous substances whenever and wherever they occur.

EPA will continue to enhance its emergency response infrastructure through procurement of state-of-the-art response equipment and continued training and exercising of response personnel. EPA will also ensure that the appropriate resources and contract vehicles are available to conduct necessary removal actions.

b. Homeland Security

EPA played a crucial role in response to the terrorist attacks of September 11, 2001, particularly, through its emergency response program. In FY 2004, the Agency will improve its ability to respond effectively to terrorist-related chemical, biological, and radiological incidents. These enhancements will be achieved through continued improvement of national coordination and decision-making for large-scale incidents; improved field response capabilities in EPA Regions through better-trained responders and improved specialized equipment; improved capabilities of National Response System (NRS) special forces such as the Environmental Response Team (ERT) and the National Decontamination ("Decon") Team; and improved coordination with and enhancement of other response agencies.

In FY 2004 Homeland Security activities will continue to concentrate on implementing recommendations in the September 11 Lessons Learned Report. Efforts will include improving the operations of the National Incident Coordination Team which serves that EPA focal point for coordinating response efforts and handling cross-program and multi-program issues before and during terrorist incidents. The program will also continue to upgrade the EPA Emergency Operations Center and coordinate development of a comprehensive EPA Continuity of Operations/Continuity of Government plan that can be immediately activated when a catastrophic emergency occurs.

EPA's field response capability relies on a support infrastructure including specialized equipment, equipment inventories, and laboratory support. The Agency will continue to build on its equipment support by identifying state-of-the-art detection, monitoring, and response equipment designed to address chemical, biological, and radiological agents. Also, EPA will build inventories of standard response equipment such as personal protective gear to ensure that it is prepared to respond to multiple incidents. Equipment will be maintained and replaced as necessary to ensure the Agency has the best technology available.

EPA's field responders and National Response System special forces require extensive training in a variety of response-related areas, including scientific and technical training for detection, analysis, and response to chemical, biological, and radiological agents; and training in incident command system response management processes.

Training courses will be developed and implemented for different levels of response experience and involvement, including refresher courses for senior, experienced responders; in-depth training for newer responders in both scientific and response management areas; and training for all responders in state-of-the-art response techniques and emerging chemical, biological, and radiological threats.

EPA's Environmental Response Team (ERT) will continue to provide specialized field support to Regional responders, including specialized air monitoring, health and safety support, and other scientific and technical support. ERT will continue to enhance its capabilities in its Edison, New Jersey, Cincinnati, Ohio, and Las Vegas, Nevada, locations to ensure that they are ready at all times to quickly and effectively meet the specialized field support needs of EPA's responders, including those responses to terrorist incidents with biological, chemical, and radiological agents.

EPA will continue the development of the National Response Decontamination Team (Decon Team) that provides unique, immediate response capabilities to safely and effectively support decontamination activities related to chemical, biological, and radiological terrorism events. While focused domestically, the Decon Team may respond worldwide delivering scientific and engineering expertise for the decontamination of buildings, building contents, public infrastructure, indoor environments and the associated environmental media. The primary function of the Decon Team is to support EPA OSCs conducting or overseeing response activities under the authorities of the National Contingency Plan (NCP) at the scene of the aftermath of a weapon of mass destruction (WMD) event. The Decon Team is designed to integrate with and operate from within incident command structures, along with and complementing other Special Forces. When not fully engaged, this team is devoted to preparedness activities related to the team's primary function.

EPA's capability to respond effectively to chemical, biological, and radiological incidents will be measured through the Core Emergency Response (Core ER) program. This continued enhancement in EPA's Regional response capabilities will cover all aspects of the Core ER program, including Regional Response Centers, transportation, coordination with backup Regions, health and safety, delegation and warrant authorities, response readiness, response equipment, identification clothing, training and exercises, and outreach. The Agency will establish measurable improvement goals in Core ER and will work toward that improvement through exercises and other program enhancements.

EPA has established a criteria of excellence through the structure of the Core ER program. While EPA is currently prepared to respond to chemical, biological, and radiological incidents, improvement in the emergency response and homeland security readiness measure will demonstrate an increased ability to respond quickly and effectively to national-scale events. The FY 2004 Core ER target is to improve emergency response and homeland security readiness by 10% from the FY 2003 baseline performance.

c. Pipeline Management Review/RA Construction

The Agency initiated the Superfund Pipeline Management Review (PMR) during FY 2002 to evaluate and address the reduction in construction completions during FY 2001 and the potential shortfall of remedial action funding in FY 2002 and the out years. The purpose of the PMR is to ensure that Agency resources are properly focused to achieve maximum results, including protection of human health and the environment, as well as, progress towards completion of response actions at sites.

As of January 1, 2003, Superfund has 1,499 final and deleted sites on the NPL, of which approximately 650 require response actions (also called construction) to achieve protection of human health and the environment. As the program has matured, more sites have advanced to the construction phase. Superfund construction projects are technically complex and costly, and the growth in the number, size, duration and cost of these projects over time has resulted in a backlog of construction projects awaiting funding. Superfund cleanups directly support the Agency goal of ensuring that the Nation's land is protected.

Construction completion has been the primary performance measure for the Superfund program and the Agency remains committed to completing construction at Superfund sites. The program achieved 42 construction completions during FY 2002, for a total of 846 completions since the inception of the program. EPA projections indicate that construction completion accomplishments are likely to remain at approximately 40 during FY 2004. Since the beginning of the program, the Agency has averaged 42 construction completions per year. Through the PMR, EPA is increasing the precision with which it tracks construction completion candidates and projects future construction completion achievements, extending the planning horizon for making funding decisions for Superfund construction projects, and implementing new policies and actions to maximize the use of resources available for construction. The Agency has moved to a three year planning cycle to identify and track construction completion candidate sites. EPA continues to closely follow site progress and identify potential critical points as sites move toward construction completion.

Starting in FY 2003, as part of the three year cycle for construction completion planning and tracking, the Agency will regularly conduct detailed and comprehensive reviews of construction completion candidates for the current year and the following two years. The information collected from the discussions will be added to the tracking system to better follow site progress, identify potential problems, and sharpen projections of future construction completions.

Funding for Superfund construction projects is critical to achieving risk reduction and construction completion measures. Although funding levels for the program have remained relatively stable in recent years, the cost of the Superfund construction projects underway and those awaiting funding is increasing. As a result, a backlog of projects ready to begin construction; but awaiting funding has developed.

Through the PMR, the Agency is continuing the following internal actions to address the shortfall in funding:

1. Review the scope, budget and schedule of ongoing construction projects to ensure available resources are directed where they are immediately needed,
2. Review construction start candidates to ensure that sites that present an immediate risk to human health are addressed, while balancing the programmatic need to complete construction at other sites,
3. Emphasize "enforcement first" to maximize the involvement of responsible parties to conduct cleanups, and
4. Aggressively pursue alternative sources of funding to supplement annual appropriations. Alternate sources of funds include unexpended funds in program contracts and other funding agreements, and responsible party settlement resources that are available and can be used to finance response actions. EPA will use deobligated funds for remedial work at high priority sites.

The first priorities for response funding are classic emergencies and actions necessary to address immediate threats to human health. Ongoing RAs, mixed funding, and mixed work projects receive priority for funding over new cleanup work. New Fund-financed cleanup work (with the exception of emergency and time-critical removal actions) will be subject to priority ranking by the National Risk-Based Priority Panel and will be screened to ensure actions have been taken to compel all appropriate PRPs to conduct the cleanup. The Panel consists of representatives from each region and HQ (OERR and OSRE) and utilizes a risk-based environmental priority setting approach. New cleanup work is funded based on actual or potential risks to human health and the environment as well as the need to maintain construction progress. Determination on whether a project represents new or ongoing work will be made by the Panel. New cleanup work consists of large removal actions that exceed funding levels

available within a region's baseline removal budget, as well as cleanup construction activities at sites. The panel meets one or more times a year for evaluation of projects.

d. Post Construction

As a result of the increase in construction completion sites, the post construction workload required to ensure that the Superfund response actions remain protective for human health and the environment also is increasing. Post construction encompasses a number of discrete but related activities including: Five Year Reviews; implementation, monitoring and enforcement of institutional controls; operation and maintenance and long-term response actions; optimization of remedies; and deletion of sites from the NPL. EPA, states, Federal facilities, PRPs, local governments and communities all play an integral role in performing post construction activities. External stakeholder interest in post construction activities is high. The EPA Inspector General has completed reviews of the program's Five Year Review performance and corrective actions have been identified and implemented. Resources for the Future (RFF) and other external organizations have completed research studies on long term stewardship. In its report "Superfund's Future: What Will It Cost?", RFF is critical of the Agency's post construction efforts, particularly in the quality of Five Year Review reports and the implementation and management of institutional controls.

Five Year Reviews are required by statute and program policy, generally when residual contamination remains on site after cleanup. Five Year Reviews provide an opportunity to evaluate remedies, correct problems or deficiencies, and adjust operations and maintenance where necessary. Five Year Reviews have been completed at approximately 1000 sites as of October 2002. Between 150 and 180 reviews per year are scheduled over the next several years. The Agency committed to eliminate the backlog of overdue reviews by the end of 2002 and achieved this goal. Revised guidance on conducting Five Year Reviews was issued in June 2001 and training has been provided to all regions with the goal of improving the quality of the Five Year Reviews and the resulting reports.

Institutional controls are administrative and/or legal mechanisms intended to minimize the potential for exposure to contamination and protect the integrity of a remedy. Examples of institutional controls include zoning restrictions, excavation and building permits, easements, covenants, deed notices, and advisories. Although institutional controls are recognized as critical remedy components, the challenge is that they are often implemented, monitored and enforced by an entity other than those responsible for the cleanup. As a matter of policy, institutional controls are necessary if a site cannot support unrestricted use and unlimited exposure due to residual contamination and/or the presence of engineered remedy components that may be damaged by uncontrolled future site activities. Institutional controls can be used at any point in the cleanup, however, implementation frequently lags behind the completion of physical remediation. Institutional controls do not need to be in place to achieve construction completion, however, delays in implementing institutional controls will impact the ability to delete sites from the NPL. Guidance has been developed to aid with the identification, evaluation and selection of institutional controls and guidance is being developed on the implementation, monitoring and enforcement of institutional controls; estimating the costs of institutional controls; and planning for institutional controls. In addition, materials for community stakeholders and an institutional control tracking system are under development.

Operation and maintenance (O&M) is an important component of a Superfund response to ensure that the remedy performs as intended. Actions range from maintaining engineering containment structures (e.g., landfill covers) to operating groundwater remediation systems. O&M is the responsibility of the Federal facility, PRP or state. EPA is responsible for assuring that the work is adequately performed for the life of the project. One exception is for Fund-financed groundwater remediation systems where EPA retains operating responsibility for up to ten years (called Long Term Response Actions (LTRA)) prior to transferring the system to the state. Many sites are nearing the end of the ten year period and regions must prepare these sites for transfer. A guidance summarizing best practices is under development.

Once groundwater remediation systems have been operating, opportunities may exist to optimize or more efficiently operate the system. EPA has conducted pilot optimization studies and preliminary results indicate a potential to improve system performance and reduce costs. Once implemented, optimization reviews should provide assurances that these systems are operating efficiently prior to transfer to the state for long term operations. Optimization protocols also can be made available to PRPs and Federal facilities.

Sites can be deleted from the NPL once all response actions are complete, including implementation of institutional controls, and all cleanup levels have been achieved. As of October 2002, 265 sites were deleted from the NPL. Expeditious deletion of sites is a post construction emphasis. In FY 2003 and beyond, EPA plans to delete 30 sites per year.

e. Superfund Alternative Sites

The category of “Superfund Alternative (SA) sites” has been identified in OSWER 92-08.0-17, “Response Selection and Enforcement Approach for Superfund Alternative Sites,” a directive issued on June 24, 2002, by OSRE and OERR. This “SA” designation is an important component of the work of the Superfund program, with an increased number of sites addressed as SA sites. In order to provide accurate reporting of work and appropriate credit to EPA Regions for cleanup of non-NPL sites as well as NPL sites, SA sites have been incorporated into the SPIM.

For purposes of this appendix, references to remedial pipeline activities [i.e., Remedial Investigation (RI), Feasibility Study (FS), Combined RI/FS, Remedial Design (RD), Remedial Action (RA)] at Superfund Alternative sites apply only to those Fund-lead and PRP-lead activities at sites that the region has determined would achieve a Hazard Ranking System (HRS) score greater than or equal to 28.5. Such response actions must be carried out in a manner not inconsistent with the National Contingency Plan (NCP). Sites proposed to the NPL are included in this category. Regions should maintain adequate site documentation to support the ‘Superfund Alternative’ designation based on the criteria referenced above. **Regions should seek PRP-lead for all remedial pipeline activities at Superfund Alternative sites; these sites must be PRP-lead for RAs.** Credit for PRP-lead remedial pipeline activities at Superfund Alternative sites will only be given for activities conducted pursuant to enforceable order or agreement. Sites that meet these criteria should be identified in WasteLAN using the special initiatives indicator of “Superfund Alternative.”¹

¹The measures outlined below for remedial pipeline activities at Superfund Alternative sites are established with the intent of capturing environmental progress previously not accounted for in existing reporting systems. Their establishment is not intended to affect established priorities for response resource allocation.

B.A.2 Maximize Program Effectiveness and Efficiency

To maximize the effectiveness and efficiency of the Superfund program during FY04/05, EPA HQ and regions will work to improve the implementation of the program based on the following processes.

a. Innovative Technologies

Environmental technology development and commercialization are a top national priority for this Administration. EPA is committed to encouraging the use of new or innovative technologies for contaminated soils and groundwater. Over the next decade, the Superfund program and other Federal agencies will spend billions of dollars each year to cleanup sites contaminated with hazardous wastes. This commitment will require the use of a wide range of site remediation processes. While existing technologies that characterize and remediate contaminated sites have been successful, the investment in site clean up provides new opportunities for the development of less expensive and more effective solutions.

The Agency has made considerable progress using new technologies in Superfund. More than half of the recent remedial cleanup decisions for source control call for technologies that were not available when the law was reauthorized in 1986. The large cleanup needs remaining in EPA programs, as well as the formidable future requirements for state and other Federal agencies, provide a continuing impetus to find more effective and less costly solutions.

The unique and varying problems posed by contaminated sites present a challenge that requires knowledge and techniques from different technical disciplines. The solutions to these problems are not to be found in existing design manuals or standards of practice. Rather, EPA is developing procedures as it goes along by creatively applying technologies from various industrial applications to unique site conditions. This field of hazardous site remediation is rapidly evolving and requires considerable effort to remain informed of recent developments.

EPA is attempting to expand the participation of responsible parties in technology development by altering the Agency's historical role and working more closely with the private sector as a partner with shared objectives. Conventionally, EPA has been viewed primarily as a regulator, permit issuer, and enforcer. These functions have kept it at arms' length from industry, which tended to view the Agency with a negative bias. EPA has been working to build new relationships with the private sector that are based on other EPA roles including technology broker, researcher, and grant maker. These cooperative efforts are expected to result in better- directed research and more joint demonstration projects. A number of significant collaborative endeavors in the areas of technology development and evaluation are currently under way.

The Agency is also very committed to the dissemination of information on technology development, evaluation and deployment. Electronic information resources offer the best hope for keeping pace with rapid developments in this field. The Clean-Up Information (CLU-IN) web site at <http://clu-in.org> offers waste professionals a rich source of current information on technologies and markets. The TechDirect monthly electronic-mail service offers subscribers up-to-date information on new remediation technology products and services developed by EPA.

Federal facility sites provide an excellent testing ground for assessing and demonstrating the use of innovative technologies. Many Federal facilities offer a number of benefits: sole responsible party; acknowledged liability; controlled sites; funding; and willingness. For these reasons, the Agency expects to see more public-private partnerships established at Federal facility sites.

b. Effective Contract Management

Good contract management is a Superfund priority, as well as an Agency-wide priority. In this regard, the Agency established a national workgroup to develop a new Superfund acquisition strategy for the year 2000 and beyond. The Contracts 2000 strategy builds upon the Long Term Contracting Strategy (LTCS) paradigm. The new strategy retains two key tenets of LTCS – a one-program approach and decentralization of contracts management to the regions – and keeps the LTCS contracts infrastructure in place.

The major goals of Contracts 2000 are: 1) balancing national consistency with regional flexibility; 2) introducing more competition into the contracting process; 3) increasing small, small disadvantaged, and women-owned business participation in the Superfund contracting program; 4) adopting new contracting vehicles and methods such as performance-based contracting, and fixed price contracting; and 5) developing “performance focused” statements of work for all of the follow-on contracts.

The Agency is currently in the implementation phase of the Contracts 2000 process. We have finalized national implementation plans for the START (Superfund Technical Assessment and Response Team), ERRS (Emergency and Rapid Response Services), ESS (Enforcement Support Services), ROC (Regional Oversight Contracts), and ESAT (Environmental Services Assistance Teams) contracts and developed a strategy for acquiring Superfund design and construction services when the current Response Action Contracts (RACs) expire starting in 2005.

c. Redevelopment

Superfund cleanups address real threats to public health and the environment and have been instrumental in returning sites to productive uses. In the last six years, EPA has become increasingly aware of the importance of fully exploring future use opportunities at Superfund sites with its partners before selecting and implementing cleanup remedies. This shift in thinking has resulted in Superfund sites, which were once thought to be unusable, being “recycled” back into productive use. EPA is encouraging the reuse of Superfund sites in several ways, such as making cleanup decisions that are consistent with intended reuse and limiting the liability of interested developers. Large and small businesses, shipping terminals, community libraries, sports fields, and golf driving ranges are just a few of the many ways in which Superfund sites are being reused following their cleanup.

The Superfund program is undertaking a nationally coordinated effort — the Superfund Redevelopment Program (SRP) — to facilitate the return of Superfund sites to productive use. Announced on July 23, 1999, this program builds on the success noted above, as well as on the achievements of the Superfund reforms focused on economic redevelopment. In carrying out this program, the priority remains the protection of human health and the environment. While operating within the current regulatory and statutory framework, EPA will take full advantage of its administrative flexibility in implementing SRP. The Superfund Program remains committed to accelerating the pace of cleanups without compromising its “enforcement first” approach, which includes the recovery of costs from those responsible for the pollution. SRP will focus on the activities that support remedy selection and design. EPA does not anticipate reopening formal decisions already made, such as RODs and enforcement orders and decrees.

Under SRP, pilot projects were selected to enhance the involvement of local governments in determining the potential future uses of Superfund sites and to demonstrate tools that can be used to facilitate redevelopment. Ten pilot sites were selected during FY 99, forty additional pilots were selected during FY 00, and 19 more sites in FY 02. All pilots are being monitored and evaluated for lessons learned and potential future program enhancements. The other components of SRP include: revisions to policy and guidance, where needed, and new guidance and technical tools; outreach to share information about site reuses, the tools that can help stakeholders repeat those successes at other sites, and the reuse potential of specific sites; and partnerships with other public and private entities with resources or other capabilities to support the redevelopment of the sites. (Please see the Superfund

Redevelopment web site at www.epa.gov/superfund/programs/recycle/index.htm. The reuse of Superfund sites is taking place now, and with a coordinated national effort, EPA can accomplish even more.

d. Reforms

Since 1993, EPA has launched three rounds of reforms to Superfund to address criticisms raised by affected parties and to improve the pace, cost, and fairness of the program. Each set of reforms consists of various initiatives and pilots focusing on changes to the program that can be implemented within the existing statutory framework. These reforms were intended to accomplish different goals, ranging from strengthening the program to testing concepts developed during Congressional debate on reauthorization legislation. The reforms have helped to improve the overall performance of the program. EPA has effectively reduced the pursuit of small volume (i.e., de minimis and de micromis) contributors by private parties, increased public involvement in the cleanup process by establishing Community Advisory Groups and promoting the availability of Technical Assistance Grants, promoted economic development and environmental justice with Brownfields and job training initiatives, and saved in excess of \$1 billion in estimated response costs through the National Remedy Review Board and the Remedy Update Reform. EPA has streamlined cleanups, increased fairness and made common sense improvements to Superfund. As a result of all the reforms, Superfund is a dramatically different program today than it was at its inception.

B.B. FY 04/05 RESPONSE TARGETS AND MEASURES

B.B.1. OVERVIEW OF FY 04/05 RESPONSE ACTIONS TARGETS/MEASURES

The Superfund Comprehensive Accomplishments Plan (SCAP) is used by the Assistant Administrator for the Office of Solid Waste and Emergency Response (AA OSWER), Assistant Administrator for the Office of Enforcement and Compliance Assurance (AA OECA), and senior Superfund managers to monitor progress each region is making towards achieving the Government Performance and Results Act (GPRA) annual performance goals. In addition, SCAP will continue to be used as an internal management tool to project and track activities that contribute to these GPRA goals and support resource allocation. The program will set national goals based on historical performance and performance expectations within a limited budget for the performance goals in GPRA and track accomplishments in the activities contributing to those goals. Regions should continue to plan and report accomplishments in WasteLAN as they have traditionally.

To more clearly reflect the relationship between GPRA and the SCAP process, GPRA annual performance goals and measures and program targets and measures are defined as follows:

- **GPRA Annual Performance Goals (APG) and GPRA Annual Performance Measures (APM)** - The Agency's Annual Plan describes the specific annual performance goals, annual measures of outputs and outcomes, and activities aimed at achieving the performance goals that will be carried out during the year. APGs are the specific activities that the Agency plans to conduct during the fiscal year in an effort towards achieving its long-term strategic goals and objectives. APMs are used by managers to determine how well a program or activity is doing in achieving milestones that have been set for the year. The annual performance goals will inform Congress and Agency stakeholders of the expected level of achievement for the significant activities covered by the GPRA objective. The goals are a subset of the overall planning and budgeting information that has traditionally been tracked by the Superfund program offices.
- **Program Targets and Measures** are activities deemed essential to tracking overall program progress. Program targets are used to identify and track the number of actions that each region is expected to perform during the year and to evaluate program progress. Program measures are used to show progress made in achieving program priorities.

The following pages contain, in pipeline order, the definitions of the FY 04/05 removal and remedial activities, GPRA annual performance goals, GPRA and program measures, and removal and remedial project support activities. Exhibit B.1 displays the full list of removal and remedial activities defined in this Appendix. Exhibit B.4, at the end of this Appendix, lists the subject matter experts for each relevant subject area.

B.B.2. SUPERFUND DURATIONS [To be updated later]

The Superfund program has tracked remedial pipeline durations for several years in the Superfund Senior Management Reports as part of Superfund progress evaluation. As program management emphasis shifts from administrative progress to more comprehensive measurement of program progress, OERR will track additional durations besides the remedial pipeline durations. These durations include: Engineering Evaluation/Cost Analysis (EE/CA) duration; Expanded Site Inspection/Remedial Investigation (ESI/RI) duration; removal duration; average duration between proposed listing to first removal or remedial action; and average duration from action memorandum to first removal completion. In FY 04/05, OERR will track the average action and site durations presented below. These durations are not SCAP measures; they are presented here for informational purposes only. HQ is responsible for calculating and publishing the durations in the Superfund Senior Management Reports; however, regions are responsible for entering and maintaining accurate data from which durations can be derived.

The durations only cover non-Federal actions and are calculated based on actual dates. In addition, they do not include takeovers (within actions) or phased actions. These durations are tracked by the response and enforcement programs.

- Average Remedial Investigation/Feasibility Study (RI/FS) Duration
- Duration from Record of Decision (ROD) to Remedial Design (RD) Start
- Duration from ROD to Remedial Action (RA) Start

EXHIBIT B.1
RESPONSE ACTION ACTIVITIES

ACTIVITY	GPRA		PROGRAM	
	APG	APM	Target	Measure
Remedial Investigation (RI) Starts (NPL & Superfund Alternative)				✓
Feasibility Study (FS) Starts (NPL & Superfund Alternative)				✓
Combined RI/FS Starts (NPL & Superfund Alternative)				✓
Treatability Studies				✓
Start of Public Comment Period (Proposed Plan to Public) (NPL & Superfund Alternative)				✓
RI/FS Duration (NPL & Superfund Alternative)				✓
Decision Document Developed				✓
Final Remedy Selected/Final ROD Authority		✓		
Engineering Evaluation/Cost Analysis (EE/CA)				✓
Removal Starts	✓			
Removal Completions				✓
RD Start (NPL & Superfund Alternative)				✓
RD Completion (NPL & Superfund Alternative)				✓
RA Start (NPL & PRP-lead Superfund Alternative)				✓
RA Contract Award (NPL & PRP-lead Superfund Alternative)				✓
Start of On-Site Construction				✓
Operational and Functional (O&F)				✓
Completion of a Response Action/Activity (NPL & PRP-lead Superfund Alternative)				✓
NPL Site Construction Completions	✓			

NOTE: Accomplishments are updated and reported on a daily basis. Selected National reports are run quarterly.

EXHIBIT B.1 (cont'd)
RESPONSE ACTION ACTIVITIES

ACTIVITY	GPRA		PROGRAM	
	APG	APM	Target	Measure
Long-Term Response Action (LTRA & PRP LR) (NPL & PRP-lead Superfund Alternative)				✓
Operation and Maintenance (O&M)				✓
Cleanup Goals Achieved				✓
NPL Site Completions				✓
Five-Year Reviews			✓	
Partial NPL Deletion				✓
Final NPL Deletion			✓	
Sites with Land Ready for Reuse		✓		
Acres at Sites with Land Ready for Reuse		✓		
Human Exposure Under Control		✓		
Migration of Contaminated Groundwater Under Control		✓		
Populations Protected				✓
Cleanup Technologies Applied				✓
Support Agency Assistance				✓
Technical Assistance				✓
Pre-Design Assistance				✓

NOTE: Accomplishments are updated and reported on a daily basis. Selected National reports are run quarterly.

B.B.3 Record of Decision (ROD)

A ROD is prepared after completion of public comment period on the FS and proposed plan for an early action (remedial authority) or long-term response action. The ROD identifies the Agency's selected remedy.

a. ROD Changes

After a ROD is signed, new information may be generated that could affect the remedy selected. Three types of changes can occur: Other Remedy Change, Explanation of Significant Differences, and ROD Amendment. All of these documents need to be sent to the below HQ address within 5 (five) days after signing:

US EPA
Attn. Superfund Docket, 5202G
Ariel Rios Building
1200 Pennsylvania Avenue N.W.
Washington DC 20460

i. Other Remedy Changes Document Non-Significant Remedy Changes

Non-significant remedy changes fall within the normal scope of changes occurring during the Remedial Design/Remedial Action (RD/RA) or limited RA. These changes typically result from value engineering. This may cause minor changes in the type/cost of materials, equipment facilities, services, and supplies. When such changes do not significantly affect the scope, performance, or cost of the remedy, they are considered minor or non-significant.

Other Remedy Changes should be documented in a Note to File or Memorandum to File, titled "Other Remedy Change." Copies of these documents shall be placed into the Administrative Record (AR), and need to be mailed to the above address at HQ. Since the document is placed into the AR, it is available for public review. A formal public comment period, public meeting and responsiveness summary are not needed. An Other Remedy Change is not a new ROD and should not be coded as such in WasteLAN. It should be entered as a SubAction to the ROD (Action Name = Record of Decision and SubAction Name = Other Remedy Change). Other Remedy Change data are entered into WasteLAN at the time the document is signed. Response action and cost data only need to be entered when they change. Other Remedy Changes are tracked as an internal reporting measure.

ii. Explanation of Significant Differences (ESDs) Document Significant Changes to a Component of a Remedy

Significant changes to a component of a remedy generally are incremental changes to the hazardous waste approach selected for the site (i.e., a change in timing, cost and implementation). These changes do not fundamentally alter the overall approach intended by a remedy. When significant changes are made to a component of a remedy, an Explanation of Significant Differences (ESD) should be prepared.

A copy of the ESD is placed into the AR, and a copy needs to be mailed to the above address at HQ. The ESD is made available to the public for review. A formal public comment period, public meeting, and responsiveness summary are not required. While the ESD is being prepared and made available to the public, response activities should continue. An ESD is not a new ROD and should not be coded as such in WasteLAN. It should be entered as a SubAction to the ROD (Action Name = Record of Decision and SubAction Name = Explanation of Significant Dif). ESD data are entered in WasteLAN at the time of ESD signature. Response action and cost data only need to be entered when they change. ESDs are tracked as an internal reporting measure.

iii. ROD Amendments are Fundamental Changes to the ROD

When the hazardous waste management approach selected in the ROD is reconsidered, it is a fundamental change. For example, the innovative technology originally selected in the ROD did not perform satisfactorily during the pilot scale testing, and a decision is made to switch to another remedy. This would represent a fundamental change. If, as a result of PRP negotiations, the remedy in the ROD is changed from incineration to bioremediation, this also represents a fundamental change. When such fundamental changes or amendments are made to a remedy, the ROD process (revised proposed plan, public comment period, public meeting, responsiveness summary, and amended ROD) should be repeated. The amended ROD must be placed in the AR and a copy must be mailed to the above HQ address. A fundamental change to the ROD should be recorded as a ROD amendment SubAction in WasteLAN (Action Name = Record of Decision and SubAction Name = ROD Amendment). Regions must enter the actual completion date of the ROD Amendment along with the Alternative Name, Media Name, Media Type, Selected Response Actions, and cost data. ROD Amendments are tracked as an internal reporting measure.

b. RODs Requiring No Physical Construction

At some NPL sites, EPA may determine, through the Remedial Investigation/Feasibility Study (RI/FS) (or other means), that no physical construction is necessary to protect human health and the environment. Such a determination may be documented in no action/no further action RODs, including RODs that only require monitoring, and Limited Action RODs requiring monitored natural attenuation or institutional controls only.

These ROD events should be coded into WasteLAN as follows:

- Action Name = Record of Decision;
- Alternative Name
- Media Name
- Media Type (Air, Groundwater, Leachate, Liquid Waste, Other, Residuals, Sediment, Sludge, Soil, Solid Waste, Surface Waste); and
- Selected Response Actions
 - No Action RODs:
 - No Action
 - No Further Action
 - Monitoring

Cost data should be entered as 0 (zero)

- Limited Action RODs:
 - Natural Attenuation
 - Institutional Controls (Access Restriction, Access Restriction-Guards, Deed Restriction, Drilling Restriction, Fishing Restriction, Institutional Controls Not Otherwise Specified (N.O.S.), Land Use Restriction, Monitoring, Recreational Restriction, Revegetation, Swimming Restriction, and Water Supply Use Restriction)

B.B.4 RESPONSE ACTION DEFINITIONS

PART I. REMEDY SELECTION

a. REMEDIAL INVESTIGATION (RI) STARTS (NPL & Superfund Alternative)

Definition:

The purpose of the RI is to collect data necessary to adequately characterize the site for the purpose of developing and evaluating effective remedial alternatives. The RI provides information to assess the risks to human health and the environment and to support the development, evaluation, and selection of appropriate response alternatives.

The RI may be conducted alone, as part of a site-wide integrated ESI/RI assessment, or as a combined Remedial Investigation/Feasibility Study (RI/FS). The start of an RI/FS is a program measure. The RI start and RI/FS start definitions are the same. Regions are not required to enter the RI start date if the RI is being conducted as part of an ESI/RI or RI/FS.

Obligation of funds for forward planning, community relations and/or other support activities do not constitute a RI start. The appropriate use of Special Account funds for remedial investigations is provided in the "Guidance on Key Decision Points in Using Special Account Funds" dated September 28, 2001.

Definition of Accomplishment:

Fund-financed (Including F-, TR - and S-lead actions) - Credit for a Fund-financed RI (Action Name = Remedial Investigation) start at an NPL or Superfund Alternative site is received when funds are obligated and the actual start date (Actual Start) has been recorded in WasteLAN. Funds are obligated when:

- The contract modification or work assignment for the RI has been signed by the EPA Contracting Officer;
or
- An IAG has been signed by the other Federal agency [Bureau of Reclamation (BUREC) or USACE]; or
- A Cooperative Agreement has been signed by the Regional Administrator or designee to conduct a RI.

If a subsequent RI is initiated without a new obligation of funds, the start date as recorded in WasteLAN is defined as EPA's written approval of the work plan for the subsequent RI.

PRP- financed from a Special Account (Including Special Account Financed Action performed by EPA (SA-lead), the State (SS-lead), or Tribal Government (ST-lead) actions¹) - Credit for a special account-financed RI (Action Name = Remedial Investigation) start at an NPL or Superfund Alternative site is received when funds are obligated and the actual start date (Actual Start) of the RI has been recorded in WasteLAN. Funds are obligated when:

¹ Actions qualify for SA, SS, and ST leads, when the majority of the funding for the total estimated cost of the RI (including direct and indirect costs) is to be paid from a Special Account. The amount contributed from a Special Account should meet or exceed the amount contributed by the largest non-PRP entity (i.e., EPA, State where applicable) toward the total estimated cost of the RI at the site. For example, if 60% of the funds needed to finance the RI are to be derived from a Special Account and 40% of the costs will be paid out of Fund monies (or a lesser amount if State cost share is received), the majority of the cost is being paid for out of a Special Account and the action qualifies for a SA, SS, or ST lead.

- The contract modification or work assignment for the RI has been signed by the EPA Contracting Officer; or
- An IAG has been signed by the other Federal agency (BUREC or USACE); or
- A Cooperative Agreement has been signed by the Regional Administrator or designee to conduct a RI.

If a subsequent RI is initiated without a new obligation of funds, the start date as recorded in WasteLAN is defined as EPA's written approval of the work plan for the subsequent RI.

PRP-financed under Federal enforcement (Includes RP- and MR-lead actions) - A PRP- financed RI (Action Name = PRP RI) under Federal enforcement at a NPL or Superfund Alternative site starts when one of the following enforcement actions occurs:

- An Administrative Order on Consent (AOC), in which the Potentially Responsible Parties (PRPs) agree to conduct the RI, is signed by the Regional Administrator or delegatee. The RI start date (Actual Start) is the date the AOC is signed. This is reported in WasteLAN as the AOC (Action Name = Administrative Order on Consent) completion date (Actual Complete); or
- The date (Actual Complete) the PRPs provide notice of intent to comply (SubAction Name = PRP Notify EPA of Intent to Comply) with a UAO for a RP-lead RI signed (Actual Complete) by the designated Regional official (Action Name = Unilateral Admin Order) and the Response Act Pd by Parties of "PRP RI"; or
- A Consent Decree (CD), in which the PRPs agree to conduct the RI, is referred by the region to Department of Justice (DOJ) or HQ. The RI start date (Actual Start) is the date the Regional Administrator signs the memo transmitting the CD to HQ or DOJ. This is recorded in WasteLAN as the CD (Action Name = Consent Decree) actual start date (Actual Start).

PRP-financed under State enforcement (PS-lead actions) - A PRP-financed RI (Action Name = PRP RI) under State enforcement at a NPL or Superfund Alternative site starts when a State order or comparable enforcement document (Action Name = State Order or State Decree), in which the PRPs agree to conduct the RI, is signed by the last appropriate State official or party (Actual Complete) and the site is covered by one of the following:

- State enforcement Cooperative Agreement signed by the Regional Administrator; or
- Superfund Memorandum of Agreement (SMOA) signed by the appropriate State and Regional official containing a schedule for RI work at the site; or
- A general SMOA signed by the appropriate State and Regional officials covering remedial work to be undertaken with schedules defined before work commences; or
- Other State/EPA agreement signed by the appropriate State and Regional official.

If a subsequent RI is initiated without a new or amended AOC, CD, State order, or other comparable State enforcement document, the start date for the RI as recorded in WasteLAN is documented by a letter, form, or memo from EPA or the State approving the work plan for the subsequent RI.

If an AOC, State order, or other comparable State enforcement document is amended for the subsequent RI, the start date is the date the last State official or Regional Administrator/delegatee signs the amendment. If a Federal CD is amended, the start date is the date on which the memo transmitting the CD to HQ or DOJ is signed by the Regional Administrator.

In-house (EP-lead action) - Credit for an in-house RI (Action Name = Remedial Investigation) start at a NPL or Superfund Alternative site is received on the date that the region conducts the initial RI scoping meeting. The start (Actual Start) is documented by a memo to file containing the minutes from the meeting.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

Regions are not required to enter the RI start date if the RI is being conducted as part of an RI/FS or site-wide ESI/RI. The RI actual start date is reported site-specifically in WasteLAN. For PRP-financed RIs, both the RI start (Actual Start) and the CD start (Actual Start) or notice of intent to comply with a UAO, AOC, State order, or State decree completion dates (Actual Complete) must be entered into WasteLAN. These dates should be the same. Funds for RIs and RI oversight are found in the pipeline operations AOA. Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator of "Superfund Alternative". This is a program measure.

b. FEASIBILITY STUDY (FS) STARTS (NPL & Superfund Alternative)

Definition:

The primary objective of a FS is to ensure that appropriate remedial alternatives are developed and evaluated such that an appropriate remedy may be selected.

The FS may be conducted alone or as part of a combined RI/FS. FS Starts and combined RI/FS starts is a program measure. Regions are not required to enter the FS start date if the FS is being conducted as part of a combined RI/FS. Obligation of funds for forward planning, community relations and/or other support activities does not constitute a FS start.

The appropriate use of Special Account funds for feasibility studies is provided in the "Guidance on Key Decision Points in Using Special Account Funds" dated September 28, 2001.

Definition of Accomplishment:

Fund-financed (Including F-, TR- and S-lead actions) - Credit for a Fund-financed FS (Action Name = Feasibility Study) start at a NPL or Superfund Alternative site is received when funds are obligated and the actual start date (Actual Start) is entered into WasteLAN. Funds are obligated when:

- The contract modification or work assignment for the FS has been signed by the EPA CO; or
- An IAG has been signed by the other Federal agency (USACE or BUREC); or
- A Cooperative Agreement has been signed by the Regional Administrator or his designee to conduct a FS.

If a first or subsequent FS is initiated without a new obligation of funds, the start date as recorded in WasteLAN is defined as the date of EPA's written approval of the work plan for the FS.

PRP- financed from a Special Account (Including Special Account Financed Action performed by EPA (SA-lead), the State (SS-Lead), or Tribal Government (ST-lead) actions²) - Credit for a special account-financed FS (Action Name = Feasibility Study) start at a NPL or Superfund Alternative site is received when funds are obligated and the actual start date (Actual Start) is entered into WasteLAN. Funds are obligated when:

- The contract modification or work assignment for the FS has been signed by the EPA Contracting Officer; or
- An IAG has been signed by the other Federal agency (USACE or BUREC); or
- A Cooperative Agreement has been signed by the Regional Administrator or designee to conduct a FS.

If a first or subsequent FS is initiated without a new obligation of funds, the start date as recorded in WasteLAN is defined as the date of EPA's written approval of the work plan for the FS.

PRP-financed under Federal enforcement (Including RP- and MR-lead actions) - A PRP- financed FS (Action Name = PRP FS) under Federal enforcement at a NPL or Superfund Alternative site starts when one of the following enforcement actions occurs:

- An AOC that addresses FS activities is signed by the Regional Administrator or delegatee. The FS start date (Actual Start) is the date the AOC is signed. This is recorded in WasteLAN as the AOC (Action Name = Administrative Order on Consent) actual completion date (Actual Complete); or
- The date (Actual Complete) the PRPs provide notice of intent to comply (SubAction Name = PRP Notify EPA of Intent to Comply) with a UAO for a RP-lead FS signed (Actual Complete) by the designated Regional official (Action Name = Unilateral Admin Order) and the Response Acts Pd by Parties of "PRP FS"; or
- The Regional Administrator signs the memorandum transmitting the CD to DOJ or HQ that addresses FS activities is referred by the region to DOJ or HQ. The FS start date (Actual Start) is the date (Actual Start) the Regional Administrator signs the memorandum transmitting the CD (Action Name = Consent Decree) to DOJ or HQ.

PRP-financed under State enforcement (PS- lead actions) - A PRP-financed FS (Action Name = PRP FS) under State enforcement at a NPL or Superfund Alternative site starts when a State order or comparable enforcement document (Action Name = State Order or State Decree), in which the PRPs agree to conduct the FS, is signed by the last appropriate State official or party (Actual Complete), and the site is covered by one of the following:

- State enforcement Cooperative Agreement signed by the Regional Administrator; or
- SMOA signed by the appropriate State and Regional official containing a schedule for FS work at the site; or

² Actions qualify for SA, SS, and ST leads, when the majority of the funding for the total estimated cost of the FS (including direct and indirect costs) is to be paid from a Special Account. The amount contributed from a Special Account should meet or exceed the amount contributed by the largest non-PRP entity (i.e., EPA, State where applicable) toward the total estimated cost of the FS at the site. For example, if 60% of the funds needed to finance the FS are to be derived from a Special Account and 40% of the costs will be paid out of Fund monies (or a lesser amount if State cost share is received), the majority of the cost is being paid for out of a Special Account and the action qualifies for a SA, SS, or ST lead.

- Other State/EPA agreement signed by the appropriate State and Regional official.

If a first or subsequent FS is initiated without a new or amended AOC, CD, State order, or other comparable State enforcement document, the start date of the FS is documented by a letter, form, or memo from EPA or the State approving the work plan for the subsequent FS.

If an AOC, State order, or other comparable State enforcement document is amended for the first or subsequent FS, the actual start date is the date the last State official or the Regional Administrator/delegatee signs the amendment. If a Federal CD is amended, the start date is the date the Regional Administrator signs the memo transmitting the CD to HQ or DOJ.

In-house (EP-lead action) - Credit for an in-house FS (Action Name = Feasibility Study) start at a NPL or Superfund Alternative site is received on the date that the region conducts the initial FS scoping meeting. The start date (Actual Start) is documented by a memo to file containing the minutes from the meeting.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

Regions are not required to enter the FS start date if the FS is being conducted as part of a combined RI/FS. The FS actual start date is entered into WasteLAN site-specifically. For a PRP-financed FS, both the FS start date (Actual Start) and the CD start date (Actual Start), or the notice of intent to comply with a UAO, AOC, State order or State decree actual completion date (Actual Complete) must be entered into WasteLAN. These dates should be the same. Funds for FS and FS oversight are contained in the pipeline operations AOA. Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator by designating these sites as "Superfund Alternative". This is a program measure.

c. COMBINED RI/FS START (NPL & Superfund Alternative)

Definition:

The purpose of the RI/FS is to assess site conditions and evaluate alternatives to the extent necessary to select a remedy.

The start of an RI/FS is a program measure. The RI/FS start and the RI start definition are the same. Regions are not required to enter the RI start date if the RI is being conducted as part of an RI/FS or a site-wide ESI/RI. Regions are not required to enter the FS start date if the FS is being conducted as part of a RI/FS.

Obligation of funds for forward planning, community relations and/or other support activities do not constitute a RI/FS start.

The appropriate use of Special Account funds for remedial investigations/feasibility studies is provided in the "Guidance on Key Decision Points in Using Special Account Funds" dated September 28, 2001.

Definition of Accomplishment:

Fund-financed (Including F-, TR- and S-lead actions) - Credit for a Fund-financed RI/FS (Action Name = Combined RI/FS) start at a NPL or Superfund Alternative site is received when funds are obligated and the actual RI/FS start date (Actual Start) is reported in WasteLAN. Funds are obligated when:

- The contract modification or work assignment for the RI/FS has been signed by the EPA CO; or

- An IAG has been signed by the other Federal agency (USACE or BUREC); or
- A Cooperative Agreement has been signed by the Regional Administrator or designee to conduct a RI/FS.

If a first or subsequent RI/FS is initiated without a new obligation of funds, the start date is defined as the date of EPA's written approval of the work plan for the RI/FS.

PRP- financed from a Special Account (Including Special Account Financed Action performed by EPA (SA-lead), the State (SS-Lead), or Tribal Government (ST-lead) actions³) - Credit for a special account-financed RI/FS (Action Name = Combined RI/FS) start at a NPL or Superfund Alternative site is received when funds are obligated and the actual RI/FS start date (Actual Start) is report in WasteLAN. Funds are obligated when:

- The contract modification or work assignment for the RI/FS has been signed by the EPA CO; or
- An IAG has been signed by the other Federal agency (USACE or BUREC); or
- A Cooperative Agreement has been signed by the Regional Administrator or designee to conduct a RI/FS.

If a first or subsequent RI/FS is initiated without a new obligation of funds, the start date is defined as the date of EPA's written approval of the work plan for the RI/FS.

PRP-financed under Federal enforcement (Includes RP- and MR-lead actions) - A PRP-financed RI/FS (Action Name = PRP RI/FS) under Federal enforcement at a NPL or Superfund Alternative site starts when one of the following enforcement actions occurs:

- An Administrative Order on Consent (AOC), in which the PRPs agree to conduct the RI/FS, is signed by the Regional Administrator or delegatee. The RI/FS start date (Action Name = PRP RI/FS) is the date the AOC is signed. This is recorded in WasteLAN as the AOC (Action Name = Administrative Order on Consent) completion date (Actual Complete); or
- The date (Actual Complete) the PRPs provide notice of intent to comply (SubAction Name = PRP Notify EPA of Intent to Comply) with a UAO for a RP-lead RI/FS signed (Actual Complete) by the designated Regional official (Action Name = Unilateral Admin Order), and the Response Acts Pd by Parties of "PRP RI/FS"; or
- A Consent Decree (CD) in which the PRPs agree to conduct the RI/FS, is referred by the region to DOJ or HQ. The RI/FS start date (Actual Start) is the date the Regional Administrator signs the memo transmitting the CD to HQ or DOJ. This is recorded in WasteLAN as the CD (Action Name = Consent Decree) actual start date (Actual Start).

³ Actions qualify for SA, SS, and ST leads, when the majority of the funding for the total estimated cost of the RI/FS (including direct and indirect costs) is to be paid from a Special Account. The amount contributed from a Special Account should meet or exceed the amount contributed by the largest non-PRP entity (i.e., EPA, State where applicable) toward the total estimated cost of the RI/FS at the site. For example, if 60% of the funds needed to finance the RI/FS are to be derived from a Special Account and 40% of the costs will be paid out of Fund monies (or a lesser amount if State cost share is received), the majority of the cost is being paid for out of a Special Account and the action qualifies for a SA, SS, or ST lead.

PRP-financed under State enforcement (PS-lead actions) - A PRP-financed RI/FS (Action Name = PRP RI/FS) under State enforcement at a NPL or Superfund Alternative site starts when a State order or comparable enforcement document (Action Name = State Order or State Decree), in which the PRPs agree to conduct the RI/FS, is signed by the last appropriate State official or party (Actual Complete) and the site is covered by one of the following:

- State enforcement Cooperative Agreement signed by the Regional Administrator; or
- SMOA signed by the appropriate State and Regional official containing a schedule for RI/FS work at the site; or
- Other State/EPA agreement signed by the appropriate State and Regional officials.

If a first or subsequent RI/FS is initiated without a new or amended AOC, CD, State order, or other comparable State enforcement document, the start date of the RI/FS is documented by a letter, form, or memo from EPA or the State approving the work plan for the subsequent RI/FS.

If an AOC, State order, or other comparable State enforcement document is amended for the first or subsequent RI/FS, the start date is the date on which the last State official or Regional Administrator/delegatee signs the amendment. If a CD is amended, the start date is the date the Regional Administrator signs the memorandum transmitting the CD to DOJ or HQ.

In-house (EP-lead action) - Credit for an in-house RI/FS (Action Name = Combined RI/FS) start at a NPL or Superfund Alternative site is received when the region has the initial RI/FS scoping meeting and the date is entered into WasteLAN. The start (Actual Start) is documented by a memo to file containing the minutes from the meeting.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

Regions are not required to report a combined RI/FS start if a separate RI and FS are being conducted. The combined RI/FS actual start date is entered into WasteLAN site-specifically. For a PRP-financed RI/FS, the RI/FS start date (Actual Start) and the CD start date (Actual Start), or notice of intent to comply with a UAO, AOC, State order, or State decree actual completion date (Actual Complete) must be entered into WasteLAN. These dates should be the same. Funds for RI/FS and RI/FS oversight are contained in the pipeline operations AOA. The Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator by designating these sites as "Superfund Alternative". This is a program measure.

d. TREATABILITY STUDIES

Definition:

Treatability studies are laboratory or field tests used to evaluate and implement one or more remedial alternatives.

Definition of Accomplishment:

Fund-financed (Including F-, S- or TR- lead) - The start date is the date of EPA's written approval, as reflected in WasteLAN, of the treatability study work plan. The completion is the written approval of the report on the results of the treatability study.

PRP-financed (Including RP-, MR- or PS- lead) - The treatability study starts when EPA approves, in writing, the treatability study work plan submitted by the PRP. The completion is the approval of the report on the results of the treatability study.

Changes in Definition FY 02/03 - FY 04/05:

None

Special Planning/Reporting Requirements:

Treatability study (Action Name = Treatability Studies) planned and actual start and completion dates are not required in WasteLAN. Treatability studies are funded as part of an ESI/RI, RI/FS, or RD. Dollars are not budgeted, planned, or obligated separately. This is a program measure.

e. START OF PUBLIC COMMENT PERIOD (PROPOSED PLAN TO PUBLIC) NPL & Superfund Alternative)

Definition:

The FS or RI/FS report is released to the public when the contamination at the site has been characterized and alternatives for remediation have been evaluated.

Definition of Accomplishment:

The Start of Public Comment Period (Proposed Plan to Public) is accomplished at a NPL or Superfund Alternative site either (1) on the date the appropriate Regional official signs a letter transmitting RI/FS reports and the proposed plan to the site repository for public review, or (2) when the first page of the approved proposed plan, which lists the dates the public comment period starts and ends, is included in the site file. This date must be recorded in WasteLAN as the actual start date (Actual Start) of the SubAction, Public Comment Period (Action Name = Feasibility Study or Combined RI/FS or PRP FS or PRP RI/FS and SubAction Name = Public Comment Period).

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

Accomplishments are based on the first proposed plan released to the public for each FS or RI/FS, regardless of lead. Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator designating these sites as "Superfund Alternative". This is a program measure.

f. RI/FS DURATION (NPL & Superfund Alternative)

Definition:

The purpose of the RI/FS is to assess site conditions and evaluate alternatives to the extent necessary to select a remedy.

The RI/FS starts with the obligation of Fund monies; or the signature of an AOC, State order, or State decree for the RI or RI/FS; or the date the Regional Administrator signs the memorandum transmitting the CD to DOJ or HQ for RI or RI/FS; or the date the PRPs provide notice of intent to comply with a UAO; or the conduct of the RI/FS scoping meeting and culminates with the signature of the ROD.

The objective of this measure is to focus on good project management of critical portions of the traditional remedial pipeline and establish a methodology which accurately assesses program performance. Duration trends provide indicators of areas that require attention.

Only RI/FS projects that started post-SARA will be used for comparison and evaluation purposes.

Definition of Accomplishment:

This measure includes all RI/FS projects at a NPL or Superfund Alternative site that have a targeted completion date in FY 04/05. The RI/FS duration will be calculated based on the RI or Combined RI/FS Start and Decision Document Developed (ROD completion) definitions specified in this Manual. Regional performance in FY 04/05 will be compared to:

- The regional and national average duration of RI/FS projects completed in FY 02/03 or FY 03/04;
- The regional and national average duration of RI/FS projects completed in previous quarters of FY 04/05.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

WasteLAN will automatically look at actual RI or RI/FS start dates and actual ROD completion dates. HQ will perform the analysis of the average durations. Fund and PRP durations at NPL or Superfund Alternative sites will be tracked. Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator. RI/FS duration is a program measure.

g. ENGINEERING EVALUATION/COST ANALYSIS (EE/CA)

Definition:

The EE/CA identifies objectives for a Non-Time Critical (NTC) response action, and includes an analysis of cost, effectiveness, and implementability of the various alternatives that may be used to satisfy these objectives.

Definition of Accomplishment:

The actual start date of an EE/CA is the date that the appropriate Regional official signs the EE/CA Approval Memorandum. This information should be recorded in WasteLAN as the actual start date (Actual Start) of the EE/CA (Action Name = Engineering Eval/Cost Analysis). The actual completion date of an EE/CA is the date that the appropriate Regional official signs the Action Memorandum. This information should be recorded as the actual completion date (Actual Complete) of the EE/CA (Action Name = Engineering Eval/Cost Analysis).

Changes in Definition FY 02/03 - FY 04/05:

None

Special Planning/Reporting Requirements:

EE/CAs are reported site-specifically in WasteLAN. Funds for EE/CAs are contained in the pipeline operations AOA. This is a program measure.

h. DECISION DOCUMENTS DEVELOPED

Definition:

A "Decision Document" is developed to document decisions or changes to decisions (at NPL, non-NPL, and Superfund Alternative sites) to:

- Perform an emergency, time-critical, or Non-Time Critical (NTC) removal; or
- Perform a remedial action.

Definition of Accomplishment:

Removals (Emergency, Time Critical, or NTC) - The date the On-Scene Coordinator (OSC), AA OSWER, or designated Regional official signs the first or original Action Memorandum for each removal. [Regions will not receive credit for subsequent Action Memos, (e.g., ceiling increases) at the same removal.] The date of the signature is recorded in WasteLAN as the actual completion date (Actual Complete) of the SubAction, Approval of Action Memo or Removal Action Memo Document. To receive credit for the Action Memo, the region must enter the OU, the media addressed, the media name, the selected alternative, the response technology, remedy cost data, Institutional Control information, and five year review information.

Remedial - The date the designated Regional Official or the AA OSWER signs the ROD at a NPL or Superfund Alternative site for each RA. This date is reported in WasteLAN as the ROD (Action Name = Record of Decision) completion date (Actual Complete). To receive credit for the ROD, the region must enter the OU, the media addressed, the media name, the selected alternative, the response technology, remedy cost data, Institutional Control information, and five year review information.

For State-lead RODs under CERCLA that result from a F, S, TR, EP lead FS or RI/FS; or a PS or MR-lead, PRP RI/FS or PRP FS where EPA concurs on the ROD should have a lead of SC. Accomplishments are reported as the date of the latest signature from EPA or the State, on the ROD at NPL or Superfund Alternative sites.

For State-lead RODs without EPA concurrence, the ROD should have a lead of 'SW'. The ROD will not be included in accomplishment reporting, however the ROD date should be recorded in WasteLAN as the date the State signs the ROD.

ROD Amendments - The date the designated Regional Official or the AA OSWER signs the amended ROD at a NPL or Superfund Alternative site should be recorded in WasteLAN as the actual completion date (Actual Complete) of the ROD Amendment SubAction (Action Name = Record of Decision and SubAction Name = ROD Amendment). The regions must use Copy Technical Data and update the information based on changes made by the current document. Changes may be made affecting the response technologies of the selected alternative, remedy cost data, Institutional Control information and five year review information.

ESDs - The date the ESD at a NPL or Superfund Alternative site is signed by the designated Regional Official or the AA OSWER is reported as the actual completion date (Actual Complete) of the ESD SubAction (Action Name = Record of Decision and SubAction Name = Explanation of Significant Diff). The regions must use Copy Technical Data and update the information based on changes made by the current document. Changes may be made affecting the response technologies of the selected alternative, remedy cost data, Institutional Control information and five year review information.

Other Remedy Changes - The date the Other Remedy Change at a NPL or Superfund Alternative site is signed by the designated Regional Official or the AA OSWER is reported as the actual completion date (Actual Complete) of the Other Remedy Change SubAction (Action Name=Record of Decision and SubAction Name=Other Remedy Change). The regions must use Copy Technical Data and update the information based on changes made by the current document. Changes may be made affecting the response technologies of the selected alternative, remedy cost data, Institutional Control information and five year review information.

These decisions will be tracked separately but reported on a combined basis.

Changes in Definition FY 02/03 - FY 04/05:

Added requirements in order to receive credit for RODs, Action Memos or other decision documents.

Special Planning/Reporting Requirements:

To receive credit for an Action Memo, the region must enter the following data into WasteLAN:

- the media addressed through the action (Media Type and Media Name),
- the Selected Response Actions,
- the response action cost data,
- the Institutional Control information, and
- the five year review information

To receive credit for a ROD, ROD amendment, ESD or Other Remedy Changes the Region must enter the following data into WasteLAN:

- the name of the selected alternative (Alternative Name),
- the media addressed in the ROD (Media Type and Media Name),
- the Selected Response Actions (which include Institutional Controls where anticipated). If Institutional Controls are anticipated at the site, Institutional Control Objectives need to be defined and entered into WasteLAN.
- associated cost data (Capital Cost, Annual O&M Cost, Total O&M Cost, Present Worth Cost, O&M Duration, and Discount Rate), and
- the five year review type (if you select discretionary, identify the five year review date. This will system generate a five year review action and plan date). (Planned RA On-Site Construction and planned PCOR and FCOR should be in the system by the time the ROD is entered). *This system change will be implemented in the next release of WasteLAN in mid-FY 03.*

WasteLAN will system generate the RI/FS or FS actual completion date if one does not already exist and a predecessor relationship was established between the RI/FS and the ROD.

Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator by designating these sites as "Superfund Alternative". This is a program measure.

i. Final Remedy Selected/Final ROD Authority

Definition:

This measure will track the Final Remedy Selected at NPL or Superfund Alternative Sites. A Final Remedy Selected occurs when a final decision has taken place at a site (i.e. the final remedy has been selected at the last OU for a site). This can include the signature of the final ROD at a site (sites with a completed ROD and no planned RODs), sites which have been deleted or partially deleted from the NPL, and sites that are construction complete.

Definition of Accomplishment:

Credit for a Final Remedy Selected at an NPL or Superfund Alternative site is received when:

- Site has a Final ROD and no existing planned ROD. The date the designated Regional Official or the AA OSWER signs the ROD at a NPL or Superfund Alternative site for each RA is reported in WasteLAN as the ROD (Action Name = Record of Decision) completion date (Actual Complete); or
- Site has been Deleted from the NPL [Action Name = Final Deletion from the NPL or Partial Deletion from NPL], which is documented when the Notice of Deletion or Notice of Partial Deletion is published in the *Federal Register*; or
- Site is Construction Complete as documented by the actual completion date (Actual Complete) of the Preliminary Close-Out Report [Action Name = Prelim Close-Out Rep Prepared], **or** the actual completion date (Actual Complete) of the Final Close-Out Report [Action Name = Close Out Report] **and** HQ has entered the Construction Completion indicator in WasteLAN.

Changes in Definition FY02/03 - FY04/05:

This is a new measure for FY 04.

Special Planning/Reporting Requirements:

WasteLAN will automatically look at actual Prelim Close-Out Rep Prepared, Close Out Report, Partial Deletion from NPL, Final Deletion from the NPL, and Record of Decision complete dates. HQ will perform the analysis of the total Final Remedies Selected. Dollars are not budgeted, planned, or obligated separately for this measure. This is a GPRA measure.

PART II. REMEDIAL IMPLEMENTATION

j. REMOVAL STARTS - THIS SECTION HAS BEEN MOVED TO APPENDIX M

Any SUPERFUND FINANCED Removals shall adhere to APPENDIX M, Removals.

REMOVAL COMPLETIONS - THIS SECTION HAS BEEN MOVED TO APPENDIX M

Any SUPERFUND FINANCED Removals shall adhere to APPENDIX M, Removals.

k. REMEDIAL DESIGN (RD) START (NPL & Superfund Alternative)

Definition:

The RD converts the remedy selected in the ROD into a final design document for the RA. The obligation of funds for design assistance or technical assistance does not constitute a RD start.

Pre-design activities will not be counted as a RD start.

Definition of Accomplishment:

Fund-Financed (Including F-, TR-, and S-lead actions) - A Fund-financed RD (Action Name = Remedial Design) at a NPL or Superfund Alternative site is started (Actual Start) when funds are obligated. An obligation is made when:

- The EPA CO signs the contract modification or work assignment for the RD; or
- A Cooperative Agreement is signed by the Regional Administrator or his designee; or
- An IAG is signed by the other Federal agency.

In those instances where design assistance is conducted prior to ROD signature, and there is not a new obligation of funds for a subsequent RD, the start of RD is defined as the written approval of the work plan to conduct these activities. If there is a new obligation of funds, the start of RD is defined as the date funds are obligated. When a RD has been prepared by other parties (e.g., water lines where the city already prepared plans and specifications) or plans developed for a similar remedy will be used, the RD actual start date is the same as the RA actual start date.

PRP-financed RD from a Special Account (including Special Account Financed Action performed by EPA (SA-lead), the State (SS-Lead), or Tribal Governments (ST-lead) actions⁴) - A PRP-financed RD from a Special Account (Action Name = Remedial Design) at an NPL or Superfund Alternative site is started (Actual Start) when funds are obligated. An obligation is made when:

- The EPA CO signs the contract modification or work assignment for the RD; or
- A Cooperative Agreement is signed by the Regional Administrator or his designee; or
- An IAG is signed by the other Federal agency.

In those instances where design assistance is conducted prior to ROD signature, and there is not a new obligation of funds for a subsequent RD, the start of RD is defined as the written approval of the work plan to conduct these activities. If there is a new obligation of funds, the start of RD is defined as the date funds are obligated. When a RD has been prepared by other parties (e.g., water lines where the city already prepared plans and specifications) or plans developed for a similar remedy will be used, the RD actual start date is the same as the RA actual start date.

PRP-financed under Federal enforcement (RP-lead) - The start (Actual Start) of a RP-lead RD (Action Name = PRP RD) at a NPL or Superfund Alternative site is credited on the date the earlier of the following actions takes place:

- The enforcement document under which the RD is to be conducted becomes effective;
 - For an Administrative Order on Consent (AOC), this is the date of signature of the AOC for RD by the Regional Administrator or his delegatee, or the date of signature of an amendment to an existing AOC to include RD;
 - For a Unilateral Administrative Order (UAO), this is the date of the PRP's written notice of intent to comply with the UAO;

⁴ Actions qualify for SA, ST, and SS leads, when the majority of funding for the total estimated response cost (including direct and indirect costs) is to be paid from a Special Account. The amount contributed from a Special Account should meet or exceed the amount contributed by the largest non-PRP entity (i.e. EPA, State where applicable) toward the total estimated response cost at the site. For example, if 60% of the funds needed to finance the estimated response are to be derived from a Special Account, and 40% of the response cost will be paid out of Fund monies (or a lesser amount if State cost share is received), the majority of the response cost is being paid for out of a Special Account and the action qualifies for a SA, ST, or SS lead.

- For a CD, this is the date the Regional Administrator signs the memorandum transmitting the CD to DOJ or HQ; or
- An official written notice to proceed is issued by EPA to the PRP.

PRP-financed under Federal enforcement (MR-lead) - The start (Actual Start) of a MR-lead RD (Action Name = PRP RD) at an NPL or Superfund Alternative site is credited on the date the earlier of the following actions takes place:

- The enforcement document under which the RD is to be conducted becomes effective:
 - For an Administrative Order on Consent (AOC), this is the date of signature of the AOC for RD by the Regional Administrator or his delegatee, or the date of signature of an amendment to an existing AOC to include RD;
 - For a CD, this is the date the Regional Administrator signs the memorandum transmitting the CD to DOJ or HQ; or
- An official written notice to proceed is issued by EPA to the PRP.

PRP-financed under State enforcement (PS-lead actions) - Credit will be given (Actual Start) for a PS-lead RD (Action Name = PRP RD) at a NPL or Superfund Alternative site based on the issuance or effective date of a State order or other comparable State enforcement document for RD (or combined RD/RA). If the RD is covered by a pre-existing State order, credit will be based on the notice to proceed date.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

The actual start date (Actual Start) of the RD (Action Name = Remedial Design or PRP RD) must be entered into WasteLAN. Accomplishments are reported site-specifically. Funds for RDs are in the pipeline operations AOA. This is a program measure. Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator by designating these sites as "Superfund Alternative."

I. RD COMPLETION (NPL & Superfund Alternative)

Definition:

The RD converts the remedy selected in the ROD into a final design document for RA.

Definition of Accomplishment:

A RD at an NPL or Superfund Alternative site is complete when:

- ***Fund-financed (Including F-, TR-, and S-lead actions)*** - EPA approves, in writing, the final design document.
- ***PRP-financed under Federal enforcement (Including MR- and RP-lead actions)*** - EPA approves, in writing, the final design document.
- ***PRP-financed under State enforcement (PS-lead actions)*** - the State approves the final design document.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

The actual completion date (Actual Complete) of the RD (Action Name = Remedial Design or PRP RD) must be entered into WasteLAN. Accomplishments are reported site-specifically. This is a program measure. Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator by designating these sites as "Superfund Alternative." Regions are required to copy technical data from the ROD at completion of the RD. The regions are required to update any technical or cost data if there are any changes. This can be accessed through the Selected Remedy Summary screen.

m. REMEDIAL ACTION (RA) START (NPL & PRP-lead Superfund Alternative)

Definition:

A RA is the implementation of the remedy selected in the ROD. Fund-financed remedial actions (including RAs financed from a Special Account) can only be funded at sites that are final on the NPL. PRP-financed (except RAs financed from a Special Account) actions may be performed at NPL and Superfund Alternative sites.

The appropriate use of Special Account funds for remedial actions is provided in the "Guidance on Key Decision Points in Using Special Account Funds" dated September 28, 2001.

DISCLAIMER: Regions will receive credit in the management of the Superfund program for "start" of a remedial action even though "initiation of physical on-site construction" may not have occurred for purposes of calculating a cost recovery statute of limitations. The date found in the remedial action actual start column of a CERCLIS report is a programmatic measure only, and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the United States. EPA reserves the right to change such data at any time without public notice.

Definition of Accomplishment:

Remedial Action

- ***Fund-financed (Including F-, TR-, and S-lead actions)*** - Credit for a RA start at a final NPL site is given on the date a contract modification for the RA is signed by the EPA CO or the IAG is signed by the other Federal agency or Cooperative Agreement is awarded, and funds are obligated.

Credit for a subsequent RA start under an existing IAG is given on the date the amendment to the IAG to include the new work is approved.

The actual start date (Actual Start) of the RA (Action Name = Remedial Action) is entered into WasteLAN.

If the action is initially funded by a bulk funding obligation, the start date is defined as the date the contracting officer signs the work assignment form or equivalent which initiates the action at the site.

- ***PRP-financed RA from a Special Account (including Special Account Financed Action performed by EPA (SA-lead), the State (SS-Lead), or Tribal Governments (ST-lead) actions***⁵ - Credit for a RA start at a final NPL site is given on the date a contract modification for the RA is signed by the EPA CO or the IAG is signed by the other Federal agency or Cooperative Agreement is awarded, and funds are obligated. Such actions will be counted towards the PRP-lead portion of the annual GPRA performance goal of 70% new PRP lead RA starts at NPL and Superfund Alternative sites (see Enforcement Appendix C of the FY 04/05 SPIM, pages C1 and C4).

Credit for a subsequent RA start under an existing IAG is given on the date the amendment to the IAG to include the new work is approved.

The actual start date (Actual Start) of the RA (Action Name = Remedial Action) is entered into WasteLAN.

If the action is initially funded by a bulk funding obligation, the start date is defined as the date the contracting officer signs the work assignment form or equivalent which initiates the action at the site.

- ***PRP-financed under Federal enforcement (MR- lead actions)*** - Credit for a RA (Action Name = PRP RA) start (Actual Start) at a NPL or Superfund Alternative site is given when either one of the following occurs and has been recorded in WasteLAN:
 - If work is performed by the PRPs under the same CD as the RD, the RA start is the date EPA approves, in writing, the PRP RD document (RD completion); or
 - Where the Fund performed the RD or the RD was done under a settlement/order for RD only and the PRPs are doing the RA under the terms of a separate CD or judgment for RA only, the RA start date (Actual Start) is either: (1) the same as the date (Actual Start) the Regional Administrator signs the memorandum transmitting the CD (Action Name = Consent Decree) to DOJ or HQ, (2) the date (Actual Complete) the judgment (Action Name = Judicial/Civil Judgment) was signed by the Federal judge, or (3) the date EPA approves, in writing, the final design document for the RD (RD completion), whichever of these dates that are applicable occur last.
- ***PRP-financed under Federal enforcement (RP- lead actions)*** - Credit for a RA (Action Name = PRP RA) start (Actual Start) at a NPL or Superfund Alternative site is given when one of the following occurs and has been recorded in WasteLAN:

If work is performed by the PRPs under the same CD or UAO (RP-lead RA only) as the RD, the RA start is the date EPA approves, in writing, the PRP RD document; or

Where the Fund performed the RD or the RD was done under a settlement/order for RD and the PRPs are doing the RA under the terms of a separate CD, UAO (RP-lead RA only) or judgment for RA only, the RA start date (Actual Start) is either: (1) the same as the date (Action Complete) of the PRP's written notice of intent to comply with the UAO for the RP-lead RA (Action Name = Unilateral Admin Order and SubAction Name =

⁵ Actions qualify for SA, ST, and SS leads, when the majority of funding toward the total estimated response cost (including direct and indirect costs) is to be paid from a Special Account. The amount contributed from a Special Account, should meet or exceed the amount contributed by the largest non-PRP entity (i.e., EPA, State), toward the total estimated response cost at the site. For example, if 50% of the funds needed to finance the estimated response are to be derived from a Special Account, and 45% of the response cost will be paid out of Fund monies, and the State pays the remaining 5% share of the response cost; the majority of the response cost is being paid out of a Special Account and the action qualifies for a SA, ST, or SS lead.

PRPs Ntfy EPA, Intent to Comply), (2) the date (Actual Start) the Regional Administrator signs the memorandum transmitting the CD (Action Name = Consent Decree), (3) the date (Actual Complete) the judgment (Action Name = Judicial/Civil Judgment) was signed by the Federal judge, or (4) the date EPA approves, in writing, the final design document for the RD (RD completion), whichever of these dates that are applicable occur last. Where the PRP is in significant non-compliance with the UAO for the RP-lead RA, credit will be withdrawn.

- ***PRP-financed under State enforcement (PS-lead actions)*** - If the PRP is doing work under a State order or comparable enforcement document, and the NPL or Superfund Alternative site is covered by a State enforcement cooperative agreement or State Memorandum of Agreement (SMOA) with a schedule for remedial action work at the site, and EPA approved the ROD, the RA (Action Name = PRP RA) start (Actual Start) is the date the State approves, in writing, the PRP RD document.

For both Fund- and PRP-financed actions - The region must identify the technologies to be constructed. To do this, the following information must be entered into WasteLAN: the Alternative Name, Media Name, Media Type, and the technology of the RA into the Response Action Type field (Selected Response Actions). Regions must also indicate if the RA is a long-term action (Critical Indicator = Long-Term Action).

Limited Remedial Action - RODs where the only action selected is Monitored Natural Attenuation and/or Institutional Controls. Limited actions are distinguished from remedial actions because there is typically no remedial design and are distinguished from no action/no further action RODs because there is at least some remedial action component. In the case of monitored natural attenuation, natural processes are used to attain cleanup goals, and the remedial action may only consist of adding monitoring wells and determining that the remedial action is complete. For institutional controls, the remedial action consists of ensuring the institutional controls are in place. Regions should enter monitored natural attenuation and institutional controls as remedial actions (Action Name = Remedial Action or PRP RA) with the Limited RA critical indicator in WasteLAN.

- ***Fund-financed (Including F-, TR-, and S-lead actions)*** - Credit for a Limited Action RA start at a final NPL site is given on the date ROD selecting a limited remedial action is signed. The actual start date (Actual Start) is entered into WasteLAN with the RA (Action Name = Remedial Action).
- ***PRP-financed RA from a Special Account (including Special Account Financed Action performed by EPA (SA-lead), the State (SS-Lead), or Tribal Governments (ST-lead) actions⁶)*** - Credit for a Limited Action RA start at a final NPL site is given on the date the ROD selecting a limited remedial action is signed. The actual start date (Actual Start) is entered into WasteLAN with the RA (Action Name = Remedial Action).
- ***PRP-financed under Federal enforcement (RP-lead actions)*** - When the PRPs are doing the Limited Action RA (Action Name = PRP RA) at a NPL or Superfund Alternative site under the terms of a CD, UAO or judgment for RA only, the RA start date (Actual Start) is the same as the date (Action Complete) of the PRP's written notice of intent to comply with the UAO (Action Name = Unilateral Admin Order and SubAction Name = PRPs Ntfy EPA, Intent to Comply); or the date the Regional Administrator signs the memorandum transmitting the CD (Action Name = Consent Decree) to DOJ or HQ; or the date (Actual Complete) the

⁶ Actions qualify for SA, ST, and SS leads, when the majority of funding toward the total estimated response cost (including direct and indirect costs) is to be paid from a Special Account. The amount contributed from a Special Account, should meet or exceed the amount contributed by the largest non-PRP entity (i.e., EPA, State), toward the total estimated response cost at the site. For example, if 50% of the funds needed to finance the estimated response are to be derived from a Special Account, and 45% of the response cost will be paid out of Fund monies, and the State pays the remaining 5% share of the response cost; the majority of the response cost is being paid out of a Special Account and the action qualifies for a SA, ST, or SS lead.

judgment (Action Name = Judicial/Civil Judgment) was signed by the Federal judge. Where the PRP is in significant non-compliance with the UAO, credit will be withdrawn.

- ***PRP-financed under Federal enforcement (MR-lead actions)*** - When the PRPs are doing the Limited Action RA at a NPL or Superfund Alternative site under the terms of a CD or judgment for RA only, the RA start date (Actual Start) is the same as the date (Actual Start) the CD (Action Name = Consent Decree) is transmitted by the Regional Administrator to HQ or the DOJ; or the date (Actual Complete) the judgment (Action Name = Judicial/Civil Judgment) was signed by the Federal judge.
- ***PRP-financed under State enforcement (PS-lead actions)*** - When the PRPs are doing the Limited Action RA (Action Name = PRP RA) at a NPL or Superfund Alternative site under a State order or comparable enforcement document, and the site is covered by a State cooperative agreement or SMOA with a schedule for work at the site, and EPA approved the ROD, the Limited Action RA starts (Actual Start) on the issuance or effective date of the enforcement instrument.

For both Fund, Special Account, and PRP-financed actions - The region must identify the technologies to be constructed. To do this, the following information must be entered into WasteLAN: the Alternative Name, Media Name, Media Type, and the technology of the RA into the Response Action Type field (Selected Response Actions). Regions must also indicate the RA is a limited remedial action (Critical Indicator = Limited Remedial Action).

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

This is a program measure. The actual start date (Actual Start) of the RA (Action Name = Remedial Action or PRP RA), the critical indicator (Long-Term Action or Limited Remedial Action), and, for PRP-lead RAs, the appropriate enforcement information must be entered into WasteLAN. The region must enter the Alternative Name, Media Name, Media Type, and the remedial response actions (Selected Response Actions) associated with the RA into WasteLAN. Funds for Fund-financed RAs are planned on a site-specific basis and are placed by name in the RA AOA. Funds for oversight of RP-lead RAs are planned on a site-specific basis and are found in the pipeline operations AOA. Superfund Alternativesites should be identified in WasteLAN using the special initiatives indicator by designating these sites as "Superfund Alternative".

n. RA CONTRACT AWARD (NPL & PRP-lead Superfund Alternative)

Definition:

Award of RA contract is the date a contract for construction of the remedy is awarded.

Definition of Accomplishment:

Fund-financed (Including F-, TR-, and S-lead actions) - Date (recorded in WasteLAN as an Actual Complete) when the EPA, State, USACE, or BUREC awards (signs) a contract to initiate a Fund-financed RA.

If a RAC contractor is assigned RA responsibility, the award of RA contract at a final NPL site is defined as the date the RA subcontract is signed by the contractor. If an ERRS contractor will be performing the RA, award of RA contract is defined as the date (Actual Complete) the contract modification for the RA is signed by the EPA CO.

PRP-financed under Federal enforcement (Including MR-, RP-, and PS-lead actions) - Date (recorded in WasteLAN as an Actual Complete) when the PRP awards a contract to initiate the RA at a NPL or Superfund Alternative site, as documented in a memorandum to the site file.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

The actual completion date (Actual Complete) must be placed in WasteLAN with the RA SubAction, Award of RA Contract (Action Name = Remedial Action or PRP RA and SubAction Name = Award of Contract). This is a program measure. Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator by designating these sites as "Superfund Alternative".

o. START OF ON-SITE CONSTRUCTION

Definition:

This measure counts all removal actions, remedial actions, limited remedial actions, or RODs for groundwater monitoring at non-NPL, NPL, or Superfund Alternative sites.

Remedial Actions - A remedial action is the implementation of the remedy selected in the ROD. Remedial actions can only be funded at sites that are on the final NPL. This measure tracks each remedial action on-site construction at a site.

Limited Remedial Action - Limited remedial actions result from RODs which select monitored natural attenuation to attain cleanup goals and/or institutional controls as the only response actions. Limited actions are distinguished from no action/no further action RODs, such as those where groundwater monitoring is the only response activity selected. Regions should enter monitored natural attenuation and institutional controls as remedial actions (Action Name = Remedial Action or PRP RA) in WasteLAN.

Groundwater monitoring is defined as the collection and analysis of groundwater samples as a result of a ROD that addresses groundwater contamination at a site or operable unit. The purpose of the groundwater monitoring is to ensure that ROD assumptions regarding no action on the groundwater are correct rather than to verify performance of a groundwater restoration or containment remedy. If the ROD specifies that groundwater monitoring is the **only** activity that will be implemented during an operable unit groundwater cleanup, then it is a no action or no further action ROD. For this type of activity, regions should enter a groundwater monitoring activity/action: [Action Name = Grndwtr Monitor (Post-ROD)] into WasteLAN.

Definition of Accomplishment:

Remedial Action (RA On-Site Construction) – A site is addressed through a remedial action when the EPA, RAC, the USACE, BUREC, State or PRP, or their contractors have begun on-site construction work at a site for the remedial action remedy selected in the ROD.

- **Fund-financed (Including F-, TR-, and S- lead actions)** - EPA, the State or their contractors have begun work for on-site construction of the remedy at a site on the final NPL. A memo to file documenting that the contractor has mobilized and began substantial and continuous physical on-site remedial action is required. This date is entered into WasteLAN as the RA On-Site Construction SubAction (Action Name = Remedial Action and SubAction Name = RA On-Site Construction Start) actual completion date (Actual Complete).
- **PRP-financed under Federal enforcement (Including RP- and MR- lead actions)** - The PRPs or their contractors have begun work at a NPL or Superfund Alternative site for on-site construction of the remedy. The date of on-site construction must be documented in a memorandum to the site file stating when the contractor began substantial and continuous physical on-site remedial action. A copy of a report of start up from the contracting party is also acceptable. The date of on-site construction must be entered into WasteLAN

as the RA On-Site Construction SubAction (Action Name = PRP RA and SubAction Name = RA On-Site Construction Start) actual completion date (Actual Complete).

In addition, to receive credit under this measure, the PRPs must be in compliance with a UAO, or an enforcement instrument signed by EPA and the PRPs, or a judgment signed by a Federal judge. The following information must be entered into WasteLAN for the enforcement instrument:

- The date (Actual Complete) the PRPs provide notice of intent to comply (Action Name = PRP Notify EPA of Intent to Comply) with a UAO for the RP-lead RA signed (Actual Complete) by the designated Regional official (Action Name = Unilateral Admin Order), and the Response Acts Pd by Parties of "PRP RA"; or
 - The date the CD (Action Name = Consent Decree) was signed by the PRPs, the designated Regional official, and the Federal judge (Actual Complete), and the Response Acts Pd by Parties of "PRP RA"; or
 - The date a judgment (Action Name = Judicial/Civil Judgment) was signed by the Federal judge (Actual Complete), and the Response Acts Pd by Parties of "PRP RA".
- ***PRP-financed under State enforcement (PS-lead actions)*** - The PRPs or their contractors have begun work at a NPL or Superfund Alternative site for on-site construction of the remedy. The date of on-site construction must be documented in a memorandum to the site file stating when the contractor began substantial and continuous physical on-site remedial action. A copy of a report of start up from the contracting party is also acceptable. The date of on-site construction must be entered into WasteLAN as the RA On-Site Construction SubAction (Action Name = PRP RA and SubAction Name = RA On-Site Construction Start) actual completion date (Actual Complete). In addition, to receive credit under this measure, the PRPs must be working under a State enforcement instrument.

Limited Remedial Action - Credit for the start of a Limited Action RA is given when:

- ***Fund-financed (Including F-, TR-, and S-lead actions)*** - The ROD selecting a limited remedial action is signed at a site on the final NPL. The actual start date (Actual Start) is entered into WasteLAN with the RA (Action Name = Remedial Action).
- ***PRP-financed under Federal enforcement (Including MR- and RP- lead actions)*** - When the PRPs are doing the Limited Action RA at a NPL or Superfund Alternative site under the terms of a CD, UAO or judgment for Limited Action RA only, the RA start date (Actual Start) is the same as the date (Action Complete) of the PRP's written notice of intent to comply with the UAO for the RP-lead RA (Action Name = Unilateral Admin Order and SubAction Name = PRPs Notify EPA, Intent to Comply); or the date the Regional Administrator signs the memorandum transmitting the CD (Action Name = Consent Decree) to DOJ or HQ [as recorded in WasteLAN as the actual CD (Action Name = Consent Decree) start (Actual Start)]; or the date a judgment (Action Name = Judicial/Civil Judgment) is signed by the Federal judge (Actual Complete). Where the PRP is in significant non-compliance with the UAO for the RP-lead RA, credit will be withdrawn.
- ***PRP-financed under State enforcement (PS-lead)*** - When the PRPs are doing the Limited Action RA (Action Name = PRP RA) at a NPL or Superfund Alternative site under a State order or comparable enforcement document, and the site is covered by a State cooperative agreement or SMOA with a schedule for work at the site, and EPA approved the ROD, the Limited Action RA start (Actual Start) is the issuance or effective date of the enforcement instrument;

Groundwater Monitoring (as the only activity taken at the site or groundwater operable unit) - Credit is given for a groundwater monitoring activity [Action Name = Grndwtr Monitor (Post-ROD)] start (Actual Start) when:

- ***Fund-financed (Including F-, TR-, and S- lead actions)*** - Fund-financed Groundwater Monitoring starts at a site on the final NPL when:
 - EPA, the State, or their contractors take the first sample of an existing well after the ROD is signed; or
 - EPA, the State, or their contractors have begun work for on-site construction of a new well, if necessary, after the ROD is signed.

This date is documented in a memo to the file.

- ***PRP-financed under Federal enforcement (Including MR- and RP- lead actions)*** - PRP-financed groundwater monitoring under Federal enforcement starts at a NPL or Superfund Alternative site when:
 - The PRPs or their contractors take the first sample of an existing well after the ROD is signed; or
 - The PRPs or their contractors have begun work at a site for on-site construction of a new well, if necessary, after the ROD is signed.

This date is documented in a memo to the file.

- ***PRP-financed under State enforcement (PS-lead actions)*** - PRP-financed groundwater monitoring under State enforcement starts at a NPL or Superfund Alternative site when a State order or comparable State enforcement document is signed by the last State official.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

RAs, limited remedial actions, and groundwater monitoring (post-ROD) starts will be tracked separately for management purposes. Groundwater monitoring and oversight of groundwater monitoring is covered under the Pipeline Operations AOA. The date of RA on-site construction (Action Name = Remedial Action and SubAction Name = RA On-site Construction Start) will be used for purposes of establishing the Statute of Limitation (SOL) determination. It is also used as the trigger date for a statutory Five-Year Review, if applicable. The Five Year Review planned completion date is set for five years after the RA On-Site Construction Start planned start date. The Five Year Review planned completion date will be greyed out and uneditable once the actual start date for the RA On-Site Construction Start is entered. *This system change will be implemented in the next release of WasteLAN in mid-FY 03.* This is a program measure.

p. OPERATIONAL AND FUNCTIONAL (O&F)

Definition:

O&F activities are conducted after physical construction of the remedy is complete to ensure that it is functioning properly and operating as designed. The NCP provides for a maximum timeframe of one year for performing O&F activities, though EPA may extend the one-year period, as appropriate. O&F determinations are made for containment (all media), groundwater restoration and surface water restoration. The determination is made after physical construction of the remedy is complete to ensure that it is functioning properly and operating as designed.

Definition of Accomplishment:

O&F is complete either one year after the construction of the remedy is complete, or when the remedy is determined concurrently by EPA and the State to be functioning properly and operating as designed, whichever is earlier. EPA may grant extensions to the one-year period in writing, as appropriate. The date is documented in the Interim or Final RA Report. It may also be documented by letter to the interested parties.

Changes in Definition FY 02/03 - FY 04/05:

The sentence 'Monitored natural attenuation remedies do not go through an O&F determination.' has been deleted from the Definition.

Special Planning/Reporting Requirements:

The completion (Actual Complete) of O&F (SubAction Name = Operational and Functional) are reported site and OU specifically in WasteLAN. This is a program measure. As a subaction, O&F does not receive funding.

q. *COMPLETION OF A RESPONSE ACTION/ACTIVITY (NPL & PRP-lead Superfund Alternative)*

Definition:

Remedial Actions - A Fund-financed remedial action at a final NPL site or PRP-lead remedial action at a NPL or Superfund Alternative site is the implementation of the remedy selected in the ROD. Remedial actions can only be funded at sites that are final on the NPL. This measure tracks each remedial action completion at a site.

Limited Remedial Action - Fund-financed limited remedial actions at a final NPL site or PRP-lead limited remedial actions at NPL or Superfund Alternative sites result from RODs which select monitored natural attenuation to attain cleanup goals and/or institutional controls as the only response actions. Limited actions are distinguished from remedial actions because there is typically no remedial design; and are distinguished from no action/no further action RODs because there is at least some remedial action component. In the case of monitored natural attenuation, the remedial action may only consist of adding monitoring wells and sampling until it is determined that the cleanup goals are met. For institutional controls, the remedial action consists of ensuring the institutional controls are in place. Regions should enter monitored natural attenuation and institutional controls as remedial actions (Action Name = Remedial Action or PRP RA) with the Limited RA critical indicator in WasteLAN.

Groundwater Monitoring (Post-ROD) - Fund-financed groundwater monitoring at a final NPL site or PRP-lead groundwater monitoring at a NPL or Superfund Alternative site is defined as the collection and analysis of groundwater samples as a result of a ROD that addresses groundwater contamination at a site or operable unit. The purpose of the groundwater monitoring is to ensure that ROD assumptions regarding no action on the groundwater are correct rather than to verify performance of a groundwater restoration or containment remedy. If the ROD specifies that groundwater monitoring is the **only** activity that will be implemented during a operable unit groundwater cleanup, then it is a no action or no further action ROD. Enter groundwater monitoring actions [Action Name = Grndwtr Monitor (Post-ROD)] into WasteLAN.

Remedial action, limited remedial action, and groundwater monitoring (post ROD) completions will be tracked separately but accomplishments will be reported on a combined basis.

Definition of Accomplishment:

Remedial Action Completion (Fund- or PRP-financed) - A Fund-financed RA completion at final NPL or a PRP-lead RA completion at a NPL or Superfund Alternative (Formerly NPL-Equivalent) site is achieved when the designated Regional official (Branch Chief or above, as determined by the EPA region) approves, in writing, the Interim or Final Remedial Action Report. The approval can be provided with an appropriate signature on the RA Report cover sheet or by letter to the originator of the RA Report. The date of the acceptance of the Interim or Final RA Report must be entered into WasteLAN as the RA (Action Name = Remedial Action or PRP RA) actual completion date (Actual Completion).

An action qualifier must be entered into WasteLAN indicating the RA was completed via an Interim or Final RA Report (Action Qualifier = Interim RA or Final RA).

Interim Remedial Action Report

Criteria for EPA approval of the Interim RA Report are:

- The remedy includes groundwater or surface water restoration, with active treatment or monitored natural attenuation, to reduce contaminant concentrations to meet cleanup goals (and cleanup goals have not been achieved);
- For active treatment, the construction of the treatment system is completed, and the system is operating as intended (operational & functional);
- For monitored natural attenuation, any necessary RA, such as monitoring wells, has been constructed;
- If the OU includes remedy components other than groundwater, construction activities are complete and cleanup goals specified in the ROD have been achieved for these components;
- A contract final inspection or equivalent has been conducted; and
- The Interim RA Report contains the information described in, OSWER Directive 9320.2-09A-P, "Close Out Procedures for National Priorities List Sites."

Note: When an Interim RA Report has already been prepared, the Interim RA report can simply be amended to create the Final RA Report. The amendment would add information on activities that occurred after the Interim RA Report was completed.

Final Remedial Action Report

Criteria for approval of the Final RA Report for a given OU are:

- All construction activities are complete, including site restoration and demobilization;
- All cleanup goals specified in the ROD have been achieved, including those for ground- and surface water restoration, if applicable;
- If containment, the remedy is operating as intended (operational & functional)
- A contract final inspection or equivalent has been conducted; and
- The Final RA Report contains the information described in, OSWER Directive 9320.2-09A-P, "Close Out Procedures for National Priorities List Sites."

The following table provides examples of remedial actions and indicates when Remedial Action Completion can be achieved.

Remedial Action Completion Examples

Example RA	RA Complete
Excavation and off-site disposal of contamination.	After all wastes have been excavated and removed from the site to an approved location; site has been restored; cleanup goals have been achieved; and the Final RA Report is approved.
On-site treatment of wastes, other than groundwater or surface water, to achieve cleanup goals (e.g., soil vapor extraction, bioremediation, incineration).	After cleanup goals have been achieved for the treated wastes, site has been restored, and the Final RA Report is approved.
Containment remedies.	After construction of the designed remedy is complete, cleanup goals have been achieved, and the Final RA Report is approved.
Groundwater and surface water restoration remedies that involve active treatment to reduce contaminant concentrations to meet cleanup goals.	After construction of the treatment plant and monitoring system are completed, the plant/system is operating as intended, (also called operational and functional, O&F) and the Interim RA Report is approved. (The Final RA Report is prepared when cleanup levels are achieved.)
Groundwater and surface water restoration remedies where restoration is later determined to be technically impracticable (TI waiver).	RA completion has already been documented by an interim RA Report, as above; however, the region, must prepare a ROD amendment to document the TI waiver.

Limited Remedial Action Completion (Fund- or PRP-financed)

The following table provides examples of limited remedial actions and indicates when Limited Remedial Action Completion can be achieved.

Limited Remedial Action Completion Examples

Example RA	RA Complete
Groundwater and surface water restoration remedies that involve monitored natural attenuation to reduce contaminant concentrations to meet cleanup goals.	After the ROD is signed, any necessary RA is conducted, and the Interim RA Report is approved. (Final RA Report is prepared when natural attenuation cleanup goals are achieved.)
Implement institutional controls.	When institutional controls are implemented as summarized in the Final RA Report.

Groundwater Monitoring (as the only activity taken at the site or groundwater operable unit)

Groundwater monitoring [Action Name = Grndwtr Monitor (Post-ROD)] completion at a final NPL site or PRP-lead groundwater monitoring completion at a NPL or Superfund Alternative site is defined as the date (Actual Complete) EPA determines that groundwater monitoring is no longer necessary. This determination may be documented in the Final Superfund Close-Out Report, five-year review report, or memorandum signed by the appropriate Regional official. A RA Report is not prepared since a RA is not being performed.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

Remedial action, limited remedial action and groundwater monitoring (post ROD) completions will be tracked separately but accomplishments will be reported on a combined basis. Regions must enter an action qualifier into WasteLAN indicating the RA was completed via an Interim or Final RA Report (Action Qualifier = Interim RA or Final RA). Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator by designating these sites as "Superfund Alternative".

r. NPL SITE CONSTRUCTION COMPLETIONS**Definition:**

Construction at a NPL site is considered complete when physical construction is complete for the entire site as a result of one or several removal or remedial actions; and a Preliminary or Final Close Out Report (PCOR or FCOR) has been signed by the designated Regional official and concurred with by HQ. The report must address construction activities for the entire site. There is only one NPL site construction completion per NPL site. For more detailed information, see OSWER Directive 9320.2-09A-P, "Close Out Procedures for National Priorities List Sites."

Definition of Accomplishment:

The following table explains coding and accomplishment requirements.

NPL Site Construction Completion		
Examples of last OU or activity	When Construction is Complete	Coding Requirements
1) Excavation and off-site disposal of contamination, 2) On-site treatment of wastes (except for groundwater restoration, bioremediation or soil vapor extraction), or 3) Containment remedies.	Pre-final inspection has been conducted, only minor punch list items remain, and the designated Regional official has signed the Preliminary or Final Close-Out Report (PCOR or FCOR).	The region enters completion date of the report into WasteLAN as the actual completion date (Actual Complete) of the Preliminary Close-Out Report [Action Name = Prelim Close-Out Rep Prepared], or the actual completion date (Actual Complete) of the Final Close-Out Report [Action Name = Close Out Report] AND HQ enters the Construction Completion indicator into WasteLAN. This action constitutes HQ concurrence with the PCOR or FCOR documentation.
In-situ bioremediation, ex-situ bioremediation, or soil vapor extraction.	Treatment unit has been constructed, is operating as designed, studies show that technology will achieve cleanup goals, and the designated Regional official has signed the PCOR.	

NPL Site Construction Completion		
Examples of last OU or activity	When Construction is Complete	Coding Requirements
Groundwater and surface water restoration remedies that involve active treatment to reduce contaminant concentrations to meet cleanup goals.	Remedy is documented in final ROD (interim action RODs must be finalized), physical construction of the remedy is complete, and the designated Regional official has signed the PCOR.	
Groundwater and surface water restoration remedies that involve monitored natural attenuation to reduce contaminant concentrations to meet cleanup goals	Remedy is documented in final ROD (interim action RODs must be finalized), any necessary physical construction is complete, and the designated Regional official has signed the PCOR.	
RODs with contingency remedies	Physical construction of the remedy is complete, a pre-final inspection has been conducted, only minor punch list items remain, the PCOR or FCOR demonstrates that use of the contingency is not anticipated, and the designated Regional official has signed the PCOR or FCOR.	
Sites deleted from the NPL prior to reaching Construction Completion.	When (1) EPA determines that all physical construction is complete under all statutory authorities, and (2) all other applicable construction completion policy criteria have been satisfied.	Consistent with requirements for final NPL sites.

NPL Site Construction Completion		
Examples of last OU or activity	When Construction is Complete	Coding Requirements
Sites requiring no remedial action or no further remedial action in the last OU. This includes groundwater monitoring if that is the only activity specified in the ROD.	No action or no further action ROD has been signed, and the designated Regional official has signed the PCOR or FCOR. Effective in FY99, No Action RODs will not be accepted for Construction Completion.	The region enters the completion date of the report into WasteLAN as the actual completion date (Actual Complete) of the PCOR (Action Name = Prelim Close-Out Report Prepared) or the actual completion date (Actual Complete) of the Final Close-Out Report (Action Name = Close Out Report).
Institutional controls as the only remedy in the ROD.	The PCOR indicates that the institutional controls are in the schedule for site completion, and the designated Regional official has signed the PCOR. If institutional controls have been implemented, region can go directly to FCOR.	AND HQ enters the Construction Completion indicator into WasteLAN. This action constitutes HQ concurrence with the PCOR or FCOR documentation.
NPL site entirely addressed through removal actions. For removals with institutional controls, see above.	<p>Fund-Financed: Contractor has demobilized, as recorded in POLREP.</p> <p>PRP-Financed: Region certifies that PRPs or their contractor have completed the removal specified in the Action Memorandum and fully met the terms of the AO, CD or judgment</p> <p>Both Fund- and PRP-Financed: The designated Regional official has signed the FCOR. The FCOR must demonstrate that the removal process included an EE/CA, which complies substantially with NCP requirements.</p>	<p>The region enters the following into WasteLAN: The removal (Action Name = Removal Action or PRP Removal) actual completion date (Actual Complete) as reported in the POLREP; and the Qualifier that indicates that the site is Cleaned Up; and the actual completion date (Actual Complete) of the Final Close-Out Report (Action Name = Close Out Report);</p> <p>AND</p> <p>HQ enters the Construction Completion indicator into WasteLAN. This action constitutes concurrence with the FCOR documentation.</p>
If an FCOR can be prepared initially, then the site can achieve the NPL Construction Completion and NPL Site Completion measure simultaneously.		

Changes in Definition FY 02/03 - FY 04/05:

Changes made to the coding requirements column as a result of the PCOR and FCOR becoming an action level activity rather than a subaction.

Special Planning/Reporting Requirements:

Regions will not receive credit for a NPL Site Construction Completion until the actual completion date of the Preliminary or Final Close-Out Report is entered into WasteLAN, the necessary documentation is submitted to HQ, and HQ enters the construction completion indicator into WasteLAN. Regions identify sites to meet the goal prior to the start of the FY. Regions may receive credit under this measure and the NPL Site Completion measure as a result of the same remedial action or removal action. Policy Five Year Review planned completion date is set for five years after the PCOR or FCOR planned completion date. The Five Year Review planned completion date will be greyed out once the actual completion date of the PCOR or FCOR is entered. *This system change will be implemented in the next release of WasteLAN in mid-FY 03.* This is a GPRA annual performance goal.

PART III. POST CONSTRUCTION

s. ***LONG-TERM RESPONSE ACTION (LTRA and PRP LR) (NPL & PRP-lead Superfund Alternative)***

Definition:

LTRA at a final NPL site is defined as the Fund-financed or PRP-financed from a special account operation of groundwater and surface water restoration measures, including monitored natural attenuation. It applies to the first ten years of restoration, which is considered a long-term response action.

Under the statute and the NCP, LTRA is defined for Fund-financed actions at final NPL sites. However, regions have sometimes used the term LTRA inexactly to describe PRP-conducted groundwater and surface water restoration measures, including monitored natural attenuation at NPL and Superfund Alternative sites. PRP actions are covered in WasteLAN by a separate action, PRP LR, where LR refers to Long-Term Response.

Since PRP-led LTRA is a specific type of O&M, the ten year timeframe is not applicable. The Federal facilities program does not use LTRA or PRP LR. Their groundwater and surface water restoration measures go from RA completion directly to O&M.

LTRA and PRP LR do not apply to groundwater or surface water containment measures, groundwater monitoring, groundwater or surface water measures initiated for the primary purpose of providing a drinking water supply, bioremediation, or soil vapor extraction.

The appropriate use of Special Account funds is provided in the “Consolidated Guidance on the Establishment, Management and Use of CERCLA Special Accounts” dated October 4, 2002.

Definition of Accomplishment:

Fund-financed LTRA, PRP-financed from a Special Account (Including Special Account Financed Action performed by EPA (SA-lead), the State (SS-lead), or Tribal Government (ST-lead) actions) or PRP LR Start: LTRA at a final NPL site or PRP-LR at a NPL or Superfund Alternative site (Action Name = Long Term Response or PRP LR) begins (Actual Start Date) on the date the designated Regional Official (Branch Chief or above) approves in writing the Interim Remedial Action Report.

Fund-financed LTRA or PRP-financed from a Special Account Completion: LTRA at a final NPL site is complete (Actual Complete Date) ten years after it begins, when cleanup goals are achieved as documented in the final RA Report, or when a technical impracticability determination is made, whichever is earlier. LTRA transitions to O&M if cleanup goals have not been achieved within the ten-year period.

PRP LR Completion: PRP LR at a NPL or Superfund Alternative site is complete (Actual Complete Date) when cleanup goals are achieved as documented in the final RA Report or when a technical impracticability determination is made, whichever is earlier.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

LTRA and PRP LR are planned on a site-specific basis (Action Name = Long-term Response or PRP LR) in WasteLAN and are used for resource allocation purposes only. Funds for LTRA are issued site-specifically in the RA AOA. Funds for oversight of the PRP LR are contained in the pipeline operations AOA.

If the PRP LR must be conducted indefinitely, regions should not enter a planned or actual completion date for the PRP LR action. If groundwater or surface water restoration measures or monitored natural attenuation are the only O&M activities being conducted at the site, regions should enter either the 'PRP LR' or the 'Operations and Maintenance' Action, not both. Superfund Alternative sites should be identified in WasteLAN using the special initiatives indicator by designating these sites as "Superfund Alternative".

t. OPERATION AND MAINTENANCE (O&M)

Definition:

O&M are the activities required to maintain the effectiveness or the integrity of the remedy, and, in the case of Fund-financed or PRP-financed from a special account⁷ measures to restore ground- or surface- waters, continued operation of such measures beyond the LTRA period until cleanup goals are achieved. Except for Fund-financed or PRP-financed from a special account ground- or surface- water restoration actions covered under Section 300.435(f)(4) of the NCP, O&M measures are initiated after the remedy has achieved the remedial action objectives and remediation goals in the ROD, and is determined to be O&F (see definition of O&F).

Depending on the remedy that was implemented at the site/OU, O&M may not be required, may only be required for a defined timeframe, or may be required to be performed indefinitely. Examples of remedies where O&M may have an indefinite period of performance are sites where waste is contained on-site and the integrity of the cap must be maintained or sites where institutional controls must be maintained. In some instances, O&M may be complete when the ground- or surface- water restoration goals are met. The State or PRP is totally responsible for O&M.

Groundwater and surface water restoration measures, including monitored natural attenuation, conducted by the PRPs is technically defined as O&M. However, regions may use the action, PRP LR, to indicate that these activities are being performed at the site.

The appropriate use of Special Account funds is provided in the "Consolidated Guidance on the Establishment, Management and Use of CERCLA Special Accounts" dated October 4, 2002.

⁷ Actions qualify for PRP-financed from a Special Account performed by the State (SS lead), when the majority of funding for the total estimated O&M cost (including direct and indirect costs) is to be paid from a Special Account. The amount contributed from a Special Account should meet or exceed the amount contributed by the largest non-PRP entity (i.e., State where applicable) toward the total estimated O&M cost at the site. For example for O&M, if 60% of the funds needed to finance the estimated cost are to be derived from a Special Account and 40% of the costs will be paid by the State, the majority of the cost is being paid for out of a Special Account and the action qualifies for a SS lead.

Definition of Accomplishment:

O&M [Action Name = Operations and Maintenance] starts when the RA is complete and the State or PRPs assume responsibility for all activities necessary to operate and/or maintain the long-term effectiveness or integrity of the actions selected in the ROD.

For OUs where Fund-financed or PRP-financed through a Special Account LTRA is required, O&M (Action Name = Operation and Maintenance) begins when LTRA is complete [see Definition of Long-Term Response Action (LTRA)].

Where appropriate, the completion of O&M is defined as the date (Actual Complete) the performance standards or conditions specified in the Cooperative Agreement that provides funds for the RA, Superfund State Contract (SSC), or CD signed by EPA, the PRPs and Federal judge have been met with respect to O&M. If O&M must be conducted indefinitely, regions should not enter an actual completion date.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

This is a program measure. O&M is planned site-specifically (Action Name = Operation and Maintenance) in WasteLAN and is used for resource allocation purposes only. Funds for oversight of O&M are contained in the pipeline operations AOA and/or a site specific special account. If O&M is not required, regions should not enter the action into WasteLAN. Where O&M must be conducted indefinitely, regions should not enter a planned or actual completion date for the O&M action.

If the only O&M activities being conducted by the PRPs at the site are groundwater or surface water restoration, including monitored natural attenuation, regions may use the 'PRP LR' Action instead of the 'Operations and Maintenance' Action. In this situation, regions should not enter both Actions.

u. CLEANUP GOALS ACHIEVED

Definition:

This measure is used to indicate when cleanup goals are achieved for groundwater and surface water restoration, including monitored natural attenuation. It tracks achievement of cleanup goals for these remedies because they have not yet been achieved at Remedial Action completion.

Definition of Accomplishment:

Cleanup goals are achieved when the designated Regional official (Branch Chief or above) approves in writing the Final Remedial Action Report for a groundwater or surface water restoration remedy. This report should update information previously prepared in the Interim Remedial Action Report. For more detailed information, see OSWER Directive 9320.2-09A-P, "Close Out Procedures for National Priorities List Sites."

Changes in Definition FY 02/03 - FY 04/05:

None

Special Planning/Reporting Requirements:

Cleanup Goals Achieved is planned on a site-specific basis (Action Name = LTRA or PRP LR or Operations & Maintenance and SubAction Name = Cleanup Goals Achieved) in WasteLAN. This is a program measure.

v. NPL SITE COMPLETIONS

Definition:

An NPL site must meet all six criteria below to be eligible for site completion:

- Cleanup goals specified in the RODs or removals are met;
- Institutional controls are in place;
- All Remedial Action Reports, On-Scene Coordinator Reports, and Pollution Reports have been completed;
- All RODs, ROD Amendments, and Explanation of Significant Differences (ESD) have been completed;
- The site is protective of human health and the environment; and
- The only remaining activities, if any, at the site are operation and maintenance activities that are performed by the State, Federal facility, or responsible parties.

There is only one NPL Site Completion per NPL site, and the site must be final on the NPL. For more detailed information, see OSWER Directive 9320.2-09A-P, "Close Out Procedures for National Priorities List Sites."

Definition of Accomplishment:

A NPL Site Completion occurs when the Final Close-out Report (FCOR) has been signed by the Regional Administrator and concurred with by HQ. The region must enter the completion date (Actual Complete) of the Final Close-Out Report [Action Name = Remedial Action or PRP RA or O&M and SubAction Name = Close-Out Report] into WasteLAN.

For examples of when to prepare FCORs, see the table in section B.A.3.q, Completion of Response Action/Activity.

Changes in Definition FY 02/03 - FY 04/05:

None

Special Planning/Reporting Requirements:

Regions may receive credit under this measure and the NPL Site Construction Completion measure as a result of the same Final Closeout Report. This is a program measure.

w. FIVE-YEAR REVIEWS

Definition:

A five-year review is a review of remedial action(s) selected under CERCLA §121(c). The purpose of the five-year review is to determine whether the remedy at a site is/remains protective of human health and the environment and to evaluate the implementation and performance of the selected remedy. Where remedial actions are still under construction, a five-year review determines whether immediate threats have been addressed and whether EPA continues to expect the remedy to be protective when all remedial actions are complete. EPA conducts statutory reviews of any site at which a post-SARA remedy, upon attainment of cleanup levels specified in the ROD, will not allow for unlimited use and unrestricted exposure. EPA conducts policy reviews at sites where remedial actions will attain cleanup levels but will take longer than five years to complete, sites with pre-SARA remedies at which the cleanup levels do not allow unlimited use and unrestricted exposure, and at NPL removal only sites where cleanup levels do not allow unlimited use and unrestricted exposure.

Definition of Accomplishment:

Five-Year Review Starts - Credit is given for a five-year review start when:

- **Fund-financed (Including F-, TR-, S- or EP-lead actions)** - EPA or the State begins any of the tasks discussed in the latest Five-Year Review Guidance. This action may be documented by a memo to the file or EPA approval of a workplan for the five-year review.
- **PRP-financed (Including MR-, RP- or PS-lead actions)** - EPA approves the five-year review workplan submitted by the PRPs under the terms of an enforcement instrument.

The actual start date (Actual Start) for the Five-Year Review (Action Name = Five-Year Remedy Assessment) must be entered into WasteLAN.

Five-Year Review Completions

Planned Completion Date: Five-year review planned completion dates are system generated based on Five-year review type entered at the time of ROD completion.

Statutory: The Five Year Review planned completion date is set for five years after the RA On-Site Construction planned start date. The Five Year Review planned completion date will be greyed out and uneditable once the actual start date for the RA On-Site Construction is entered. *This system change will be implemented in the next release of WasteLAN in mid-FY 03.*

Policy: The Five Year Review planned completion date is set for five years after the PCOR or FCOR planned completion date. The Five Year Review planned completion date will be greyed out once the actual completion date of the PCOR or FCOR is entered. *This system change will be implemented in the next release of WasteLAN in mid-FY 03.*

Discretionary: The Five Year Review planned completion date is based on the date set by the user at the time of entry of Five-year review type. *This system change will be implemented in the next release of WasteLAN in mid-FY 03.*

No Review: No Five Year Review action will be generated.

Actual Completion Date: The five-year review is complete on the date the designated Regional official signs the five year review report stating whether the remedy is, or is not, protective of human health and the environment. The actual completion date (Actual Complete) for the Five-Year Review (Action Name = Five-Year Remedy Assessment) must be entered into WasteLAN.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

In order to receive credit for a Five year review completion the region must enter the following data into WasteLAN through the SCAP screens:

- applicable OUs
- the associated remedy(ies)
- associated issue for each remedy (when issue is identified, a determination must be made as to whether the issue ‘Affects Current Protectiveness’ and ‘Affects Future Protectiveness’)
- recommendations or followup actions (a party responsible, oversight agency, and milestone date must be identified for each recommendation or followup action)
- protectiveness determination for each remedy/OU (if a determination is deferred, enter a date for when a protectiveness determination will be made)
- protectiveness statement as it appears in the five year review

If the Construction Completion flag has been checked for the site, the user must enter the following information:

1. site protectiveness determination
2. site-wide protectiveness statement as it appears in the five year review

All Sites must have the following information:

1. If future five year reviews are necessary at the site indicate if this is the final five year review at the site

Five-year review completes must be planned and reported site-specifically (Action Name = Five-Year Review Assessment) in WasteLAN. Funds are allocated in the Remedial Action AOA. This is a program target for Superfund. Five-Year Review completes are a Program Measure for Federal facilities (See Exhibit B.1 in Appendix B and Exhibit D.1 in Appendix D).

x. PARTIAL NPL DELETION

Definition:

EPA will consider partial deletion for portions of sites when no further response is appropriate for that portion of the site. Such portion may be a defined geographic unit of the site, perhaps as small as a residential unit, or may be a specific medium at the site (e.g., groundwater), depending on the nature or extent of the release(s). The criteria for partial deletion are the same as for final deletion. EPA must consider, in consultation with the State, whether the following criteria have been met for that portion of the site:

- Responsible or other parties have implemented all appropriate response actions required;
- All appropriate Fund-financed response under CERCLA has been implemented, and no further cleanup by responsible parties is appropriate; or
- The remedial investigation has shown that the release poses no significant threat to public health, or the environment and, therefore, taking of remedial measures is not appropriate.

Definition of Accomplishment:

The partial NPL deletion process begins when a Notice of Intent to Partially Delete (Action Name = Notice of Intent to Partially Delete) is published in the *Federal Register* for the specified portion of a site on the NPL. Notice of Intent to Partially Delete is completed (Actual Complete) the day the Federal Register is published. If the Direct Final Process for Partial Deletions is used, the process begins when the Direct Final Action Notice is published in the Federal Register [Action Name = Notice of Intent to Delete].

The partial NPL deletion process (Action Name = Partial Deletion from NPL) is complete (Actual Complete) when the Notice of Partial Deletion is published in the *Federal Register* for the specified portion of a site on the NPL. If the Direct Final Process for Partial Deletions is used and the comment period has ended with no adverse comments, the actual completion (Actual Complete) is the effective date of deletion specified in the Direct Final Action Notice.

HQ will enter the Partial Deletion and the Notice of Intent to Partially Delete from the NPL Action and the completion dates into WasteLAN. For more detailed information, see OSWER Directive 9320.2-09A-P, "Close Out Procedures for National Priorities List Sites."

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

Partial NPL deletions are tracked separately from final NPL deletions. Partial site NPL deletions will be entered by HQ if a portion, or portions of the release remain listed on the NPL following completion of the partial deletion.

A site deletion (Action Name = Final Deletion from NPL) will be entered by HQ if the deletion activity addresses the remaining release listed on the NPL (either as a one-time deletion activity for the entire site as originally listed, or as the last deletion activity associated with a site subject to previous partial deletions). This is a program measure.

y. FINAL NPL DELETION**Definition:**

With State concurrence, EPA may delete sites from the NPL when it determines that no further response is appropriate under CERCLA. In making that determination, EPA considers:

- Responsible or other parties have implemented all appropriate response actions required;
- All appropriate Fund-financed response under CERCLA has been implemented, and no further cleanup by responsible parties is appropriate; or
- The remedial investigation has shown that the release poses no significant threat to public health, or the environment and, therefore, taking of remedial measures is not appropriate.

Definition of Accomplishment:

The deletion process for the entire site begins when a Notice of Intent to Delete [Action Name = Notice of Intent to Delete] is published in the *Federal Register*. If the Direct Final Process for Deletions is used, the process begins when the Direct Final Action Notice is published in the Federal Register [Action Name = Notice of Intent to Delete].

The deletion process for the entire site [Action Name = Final Deletion from the NPL] is complete (Actual Complete) when the Notice of Deletion is published in the *Federal Register*. If the Direct Final Process for Deletions is used and the comment period has ended with no adverse comments, the actual completion (Actual Complete) is the effective date of deletion specified in the Direct Final Action Notice.

HQ will enter the Final Deletion from the NPL Action and the actual completion dates into WasteLAN. For more detailed information, see OSWER Directive 9320.2-09A-P, "Close Out Procedures for National Priorities List Sites."

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

An entire site deletion action (Action Name = Final Deletion from NPL) will be entered by HQ if the deletion activity addresses the remaining release listed on the NPL (either as a one-time deletion event for the entire site as originally listed, or as the last deletion activity associated with a site subject to previous partial deletions). The Action, Final Deletion from the NPL, will be used whether deletion is accomplished through the Notice of Deletion or the Direct Final Action Notice. When the Notice of Deletion is published or the date of deletion is effective, HQ will change the NPL Status in CERCLIS to "Deleted from Final NPL." This is a program target.

z. SITES WITH LAND READY FOR REUSE

Definition:

Sites with land ready for reuse refers to the total number of NPL sites, and Superfund alternative sites, and only non-NPL sites where a non-time-critical removal action was performed in which all or a portion of the site is ready for reuse.

A site has land ready for reuse when:

- The site or a portion of the site is currently in productive use, such as for commercial, recreational, ecological, residential, or public service purposes; or
- The Agency makes a determination that either: (1) Superfund response actions are unnecessary for the site or portion of the site ready for reuse (as a result of an investigation of the property), and EPA is not currently aware of other EPA or State cleanup program restrictions on land use; or (2) the risk-based cleanup goals established for the site or portion of the site have been attained (i.e., the engineering controls for the land component have been implemented and are operating as intended), subject to any restrictions identified in the Record of Decision (i.e., institutional controls). Please refer to “Guidance for Preparing Superfund Ready for Reuse Determination,” OSWER 9365.0-33-d for more information on making risk based reuse decisions.

Definition of Accomplishment:

A site is considered to have land ready for reuse when the site has been evaluated for potential reuse and the Agency has documented this decision in one or more of the following documents::

- Preliminary Assessment/Site Inspection (PA/SI) Report (only for sites that have been proposed to the NPL or otherwise designated as Superfund alternative sites)
- Record of Decision (ROD)
- Interim/Final RA Report
- Preliminary Close-Out Report
- Final Close-Out Report
- Final OSC Report (removals)
- Notice of Deletion/Partial Deletion, including Direct Final Notice of Deletion/Partial Deletion
- Five-Year Review
- Finding of Suitability to Lease (Federal facilities)
- Finding of Suitability to Transfer (Federal facilities)
- Finding of Suitability to Early Transfer (Federal facilities)
- Ready-for-Reuse Determination

A site has land ready for reuse on the date of the completion (as defined in other sections of the SPIM) of the applicable document(s) (e.g., ROD signature date). A site may also be ready for reuse on the date the Ready-for-Reuse Determination is signed by the Regional division director or designee.

The total number of sites with land ready for reuse will be derived using data entered into WasteLAN on the acres ready for reuse (see the Acres at Sites with Land Ready for Reuse measure).

Changes in Definition FY 03 - FY 04:

This is a new reporting measure in FY 04.

Special Planning/Reporting Requirements:

This GPRA reporting measure includes Federal facility and non-Federal facility NPL sites, Superfund alternative sites, and Federal and non-Federal facility non-NPL sites where a non-time critical removal has been conducted. Regions will enter, on a site-specific basis at the action level, the acres of land ready for reuse (See the Acres of Land Ready for Reuse measure). Headquarters will use that information to derive the number of sites ready for reuse. The WasteLAN screens for collecting reuse data at non-Federal facility sites are under development.

aa. ACRES AT SITES WITH LAND READY FOR REUSE

Definition:

Acres at sites with land ready for reuse is an estimate of the total land area, reported in acres, that either has been returned to productive use, or is ready for reuse based on the determination that either: (1) Superfund response actions are unnecessary for the site or portion of the site ready for reuse (as a result of an investigation of the property), and EPA is not currently aware of other EPA or State cleanup program restrictions on land use; or (2) the risk-based cleanup goals established for the site or portion of the site have been attained (i.e., the engineering controls for the land component have been implemented and are operating as intended), subject to any restrictions identified in the Record of Decision (i.e., institutional controls). Please refer to "Guidance for Preparing Superfund Ready for Reuse Determination," OSWER 9365.0-33-d for more information on making risk based reuse decisions.

In addition, the acres at sites with land ready for reuse will be further designated as either ready for *restricted* use or ready for *unrestricted* uses, **unless the site is a Federal facility**. For further direction on reporting Acres at Sites with Land Ready for Reuse at Federal Facilities, see Appendix D of the SPIM: Base Closure Decisions. A site or portion of a site is ready for unrestricted use when response activities for the site/portion of the site are unnecessary or the risk-based cleanup goals for the land support residential use. A site or portion of a site is ready for restricted use when the risk-based cleanup goals for the land support other types of use (e.g., industrial, commercial, recreational). **For Federal facility sites**, Regions will only be required to report the *total acres* that are ready for reuse.

Definition of Accomplishment:

Regions will report the acres ready for reuse when the site has been evaluated for potential reuse and the Agency has documented this decision in one or more of the following documents:

- Preliminary Assessment/Site Inspection (PA/SI) Report (only valid after the site is proposed to the NPL or has been otherwise designated as a Superfund alternative site)
- Record of Decision (ROD)
- Interim/Final RA Report
- Preliminary Close-Out Report
- Final Close-Out Report
- Final OSC Report (removals)
- Notice of Deletion/Partial Deletion, including Direct Final Notice of Deletion/Partial Deletion
- Five-Year Review
- Finding of Suitability to Lease (Federal facilities)
- Finding of Suitability to Transfer (Federal facilities)
- Finding of Suitability to Early Transfer (Federal facilities)
- Ready-for-Reuse Determination

Acres are ready for reuse on the date of the completion (as defined in other sections of the SPIM) of the applicable document(s) (e.g., ROD signature date). Acres may also be ready for reuse on the date the Ready-for-Reuse Determination is signed by the Regional division director or designee.

Changes in Definition FY 03 - FY 04:

This is a new reporting measure in FY 04.

Special Planning/Reporting Requirements:

This GPRA reporting measure includes Federal facility and non-Federal facility NPL sites, Superfund alternative sites, and Federal and non-Federal facility sites where a non-time critical removal has been conducted. Upon completion of each of the Agency documents listed above (**except the Federal facility documents**), the Region must enter the following information into WasteLAN: (1) the number of acres that are ready for unrestricted reuse; and/or (2) the number of acres that are ready for restricted reuse. At Federal facilities, Regions will only report the *total number of acres* that are ready for reuse. Headquarters will use this information to calculate the total acres of land ready for reuse. The completion dates for each of these documents, except the Ready-for Reuse Determination, is defined in other sections of the SPIM. The completion date for the Ready-for-Reuse Determination is defined above. The WasteLAN screens for collecting reuse data at non-Federal facility sites are under development.

PART IV. ENVIRONMENTAL INDICATORS

bb. HUMAN EXPOSURE UNDER CONTROL

Definition:

The Human Exposure Under Control indicator assesses the reduction in human exposure to contaminants at Superfund sites. NPL sites where human exposure is under control are defined as sites where all identified human exposure pathways from contamination at the site are under control or below health-based levels for current land and/or groundwater use conditions. “Under control” means that adequately protective controls are in place to prevent any unacceptable human exposure under current land- and groundwater-use conditions.

Definition of Accomplishment:

The criteria for determining if human exposure is controlled is found in Superfund Worksheets for Environmental Indicators (OSWER Directive 9210.0-02P), CERCLIS Online Releases Controlled Worksheets, and the “Interim-Final Guidance for RCRA Corrective Action Environmental Indicators”.

Changes in Definition FY 02/03 - FY 04/05:

This is a **GPRA** measure for FY 04 and FY 05.

Special Planning/Reporting Requirements:

Online environmental indicator worksheets must be completed and/or reviewed each year in CERCLIS (Program Management/Exposures/Releases Controlled Worksheets).

EXHIBIT B.2

Superfund Human Exposure Under Control Worksheet

Are all identified human exposure pathways from contamination at the site under control or below health-based levels for current land and/or groundwater use conditions? "Under control" means that adequately protective controls are in place to prevent any unacceptable human exposure under current land- and groundwater- use conditions only. This environmental indicator does not consider potential future land- or groundwater- use conditions nor ecological receptors.

Region: _____
 State: _____
 EPA ID: _____
 Site Name: _____

No/ Insufficient data	
<p>Step 1. Based on the most current data for the site, has all available relevant/significant information on known contaminants to soil, groundwater, surface water/sediments, and air at the NPL site been considered in this EI determination?</p> <p>List site reference document : _____</p>	
↓ Yes	
<p>Step 2. Are groundwater, soil, surface water, sediments, or air media known or reasonably suspected to be "contaminated" above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from known contaminants?</p> <p>List site reference document. _____</p>	No
↓ Yes	
<p>Step 3. Are there complete pathways between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?</p> <p>List site reference document. _____</p>	No
↓ Yes	
<p>Step 4. Are the potential exposures from Step 3 within acceptable limits under current (land and groundwater use) conditions (e.g., within the cancer risk range or HI <= 1)?</p> <p>List site reference document. _____</p>	Yes
↓ No	
<p>INSUFFICIENT DATA, More information needed to make determination</p>	<p>NO, Site Does Not Meet Definition</p>
	<p>YES, Site Does Meet Definition</p>

cc. MIGRATION OF CONTAMINATED GROUND WATER UNDER CONTROL

Definition:

The Migration of Contaminated Ground Water Under Control indicator assesses the progress in mitigating groundwater contamination. NPL sites where groundwater migration is under control are those sites where the migration of contaminated groundwater is being controlled through engineered remedies or natural processes.

Definition of Accomplishment:

The criteria for determining if groundwater migration is controlled are found in Superfund Worksheets (refer to Exhibit B.3) for Environmental Indicators (OSWER Directive 9210.0-02P), CERCLIS Online Releases Controlled Worksheets, and the “Interim-Final Guidance for RCRA Corrective Action Environmental Indicators.”

Changes in Definition FY 02/03 - FY 04/05:

This is a program measure for FY 04 and FY 05.

Special Planning/Reporting Requirements:

Online environmental indicator worksheets must be completed and/or reviewed each year in CERCLIS (Program Management/Exposures/Releases Controlled Worksheets).

EXHIBIT B.3

Superfund Migration of Contaminated Ground Water Under Control Worksheet

Definition: Is the migration of contaminated groundwater from the site being controlled through engineered or natural processes?

Region: _____
 State: _____
 EPA ID: _____
 Site Name: _____

No/ Insufficient data

Step 1. Based on the most current data on the site, has all available relevant/significant information on known and reasonably suspected releases to the groundwater been considered in this EI determination?
 List site reference document: _____

Yes

Step 2. Is groundwater known or reasonably suspected to be "**contaminated**" above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) anywhere at, or from, the facility?
 List site reference document: _____

Yes

Step 3. Is the migration of contaminated groundwater stabilized (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater" as defined by the monitoring locations designated at the time of this determination)?
 List site reference document: _____

Yes

Step 4. Does "contaminated" groundwater discharge into surface water bodies?
 List site reference document: _____

Yes

Step 5. Can the discharge of "contaminated" groundwater into surface water be shown to be "currently acceptable" (i.e., not cause unacceptable impacts to surface water, sediments, or ecosystems that should not be allowed to continue until a final remedy decision can be made and implemented)?
 List site reference document: _____

Yes

Step 6. Will groundwater monitoring/measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater"?
 List site reference document: _____

Yes

INSUFFICIENT DATA,
 More information needed
 to make determination

YES, Site Does Meet Definition

NO, Site Does Not Meet Definition

dd. POPULATIONS PROTECTED**Definition:**

This measure tracks the environmental progress achieved at NPL, Superfund Alternative and non-NPL sites through the completion of removal and remedial actions taken to prevent human exposure to contaminated materials. The following will be reported under this measure:

- Total number of sites where a removal and/or remedial action was conducted, and
- The number of people and receptors protected during removals and remedial actions that provide for:
 - Relocation of affected populations; or
 - Provision of an alternate water supply.
- The number of sites where site security is implemented

Definition of Accomplishment:

The following table identifies the medium-specific information that must be entered into WasteLAN for each category of protection provided:

<i>Site Security Measures Implemented</i>	<i>Population Relocated</i>	<i>Alternate Water Supply Provided</i>
Media Type (groundwater, soil, sediment, surface water, air, liquid waste, solid waste, leachate, debris, residuals, or other)	Media Type (groundwater, soil, sediment, surface water, air, liquid waste, solid waste, leachate, debris, residuals, or other)	Media Type (groundwater, surface water)
Media Name	Media Name	Media Name
Site Security/Institutional Control Response Actions Selected [Access Restriction, Access Restriction - Guards, Access Restriction - Fencing, Deed Restriction, Drilling Restriction, Fishing Restriction, Institutional Controls (N.O.S.), Land Use Restrictions, Swimming Restrictions and Water Supply Use Restrictions]	Population Relocated Response Actions Selected [Population Relocation - Temporary, Population - Relocation Returned, Population Relocation - Permanent, Population Relocation (N.O.S.)]	Alternative Water Supply Response Actions Selected [Alternative Drinking Water (N.O.S.), Alternative Drinking Water - Temporary Replacement, Alternative Drinking Water - Supply Reinstated, Alternative Drinking Water - Permanent Replacement]
	The predominant receptor type protected (Residential, Industrial, or Commercial)	The predominant receptor type protected (Residential, Industrial, or Commercial)
	Population Protected (number)	Population Protected (number)

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning/Reporting Requirements:

See Definition of Accomplishment. The WasteLAN data may be entered using the Smartscreen for the Action Memo and the RA. This is a program measure.

ee. CLEANUP TECHNOLOGIES APPLIED

Definition:

This measure tracks the technologies selected and the volume of hazardous waste handled during each removal action or remedial action conducted at a NPL or non-NPL site.

Definition of Accomplishment:

A removal action has been started or completed as defined in the Removal Start and Removal Completion measures or a remedial action has been started or completed as defined in the Start of a Response Action/Activity or Completion of a Response Action/Activity measures or regions must document in the interim or final RA Report or final POLREP or a memo to the files, the technologies that were implemented and the volume of hazardous waste handled.

The following information must be entered into WasteLAN for each medium addressed by the completed response action:

- Media Name;
- Media Type (groundwater, soil, sediment, surface water, air, liquid waste, solid waste, leachate, debris, residuals, or other);
- Response Actions Selected; and
- Cleanup amount.

Changes in Definition FY 02/03 - FY 04/05:

None.

Special Planning and Reporting Requirements:

See Definition of Accomplishment. The technologies selected and the volume of hazardous materials addressed through a removal action can be entered into WasteLAN through the Removal Screen or the EI screen (Views, Remedy Selection or Removal, Pipeline Operations, Options, Add/Edit EI). The technologies selected and the volume of hazardous materials addressed through a removal action or RA can be entered into WasteLAN through the Remedial Screen or EI screen (Views, Remedy Selection, Pipeline Operations, Options, Add/Edit EI). This is a program measure.

PART V. SUPPORT ACTIVITIES

***ff.* SUPPORT AGENCY ASSISTANCE**

Definition:

The activities performed by another entity to support an EPA response is support agency assistance. The support agency furnishes necessary data to EPA, reviews response data and documents, and provides other assistance to EPA.

EPA may provide States, political subdivisions, and Indian Tribes with funding to carry out a variety of management responsibilities via a support agency Cooperative Agreement to ensure the meaningful and substantial involvement in response activities.

Unless otherwise specified in the Cooperative Agreement, all support agency costs, with the exception of RA support agency costs, may be planned under a single Superfund account number designated specifically for support agency activities. RA support agency activities must be planned site-specifically and require cost share provisions.

Definition of Accomplishment:

The start of support agency assistance (Action Name = Management Assistance) is the signature of the Cooperative Agreement by the Regional Administrator or his designee. The completion of support agency assistance is the expiration or termination of the assistance agreement.

Changes in Definition FY 02/03 - FY 04/05:

None

Special Planning/Reporting Requirements:

Funds for support agency assistance are contained in the pipeline operations, enforcement, or Federal facility AOA. Planned and actual start and completion dates are not required in WasteLAN. Funds may be planned or obligated site or non-site and OU specifically; however, they must be outlayed site-specifically. This is a program measure.

***gg.* TECHNICAL ASSISTANCE**

Definition:

Technical assistance is support provided by a third party to EPA regions to conduct response activities. Third parties that may provide assistance include U.S. Army Corps of Engineers (USACE), U. S. EPA laboratories, U.S. Fish and Wildlife Service, Superfund Technical Assistance and Response Team (START), and Response Action Contracts (RAC) contractors.

Definition of Accomplishment:

The start of technical assistance (Action Name = Technical Assistance) is the obligation of funds for technical assistance. The completion is defined as the completion of the response activities for the stage at which technical assistance was requested.

Changes in Definition FY 02/03 - FY 04/05:

None

Special Planning/Reporting Requirements:

Technical assistance is paid for by the response program and is contained in the pipeline operations AOA. Planned and actual start and completion dates are not required in WasteLAN. Funds may be planned or obligated site- or non-site and OU specifically; however, they must be outlayed site-specifically. This is a program measure.

hh. PRE-DESIGN ASSISTANCE

Definition:

Pre-design assistance activities are undertaken by the USACE in preparation for initiating RD activities. This includes:

- Synopsizing RD requirements in the Commerce Business Daily (CBD);
- Developing architect/engineer (A/E) firm pre-selection list;
- Contacting A/E firms on the pre-selection list to ascertain interest in project;
- Developing A/E selection list; and
- Selecting A/E firm.

Definition of Accomplishment:

The initiation of pre-design assistance (Action Name = Design Assistance) is the signature of the IAG by USACE (obligation of funds). The completion of design assistance is the start of RD.

Changes in Definition FY 02/03 - FY 04/05:

None

Special Planning/Reporting Requirements:

Funds for pre-design assistance should be obligated prior to the signature of the ROD. Planned and actual start and completion dates are not required in WasteLAN. Funds may be planned site-or non-site and OU specifically; however, they must be obligated site-specifically. Funds for design assistance are in the pipeline operations AOA. This is a program measure.

B.C. SUBJECT MATTER EXPERTS

The following table identifies the subject matter experts for Appendix B Response Actions.

EXHIBIT B.4 SUBJECT MATTER EXPERTS

Subject Matter Expert	Subject Area	Phone #
Rafael Gonzalez	Construction Completion	703-603-8892
Richard Jeng	Construction Completion	703-603-8749
Dela Ng	Enforcement	202-564-6073
Melanie Hoff	Environmental Indicators	703-603- 9133
Silvina Fonseca	Five-Year Reviews	703-603-8799
Jim Konz	Five-Year Reviews	703-603-8841
Jeff Heimerman	Innovative Technology	(703) 603-7191
Monica McEaddy	Lead (Pb) Based Paints	703-603-0044
Larry Zaragoza	Lead (Pb) Risk Assessment	703-603-8867
Michael Bellot	Institutional Controls	703-603-8905
Tracy Hopkins	Post-Construction	703-603-8788
Kenneth Lovelace	Post-Construction	703-603-8787
JohnJ Smith	Remedial Implementation	703-603-8802
Terry Eby	Removal Implementation	703-603-8741
Mark Mjones	Removal Implementation	703-603-8727
Kevin Mould	Removal Implementation	703-603-8728
Dana Stalcup	Removal Implementation	703-603-8735
Ray Worley	Removal Implementation	703-603-8724
Robert White	Response Appendix Coordinator	703-603-8873
DavidE Cooper	Risk Assessment	703-603-8763
Matthew Charsky	RODs/Remedy Selection	703-603-8777
Bruce Means	RODs/Remedy Selection	703-603-8815
Hans Waetjen	RODs/Remedy Selection	703-603-8906
Janet Weiner	Superfund Redevelopment/PARM	(703) 603-8717
John Harris	Superfund Redevelopment	(703) 603-9075
Paul Nadeau	Superfund Post-Construction/PARM	703-603-8794

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